





YORKSHIRE PHILOSOPHICAL SOCIETY.

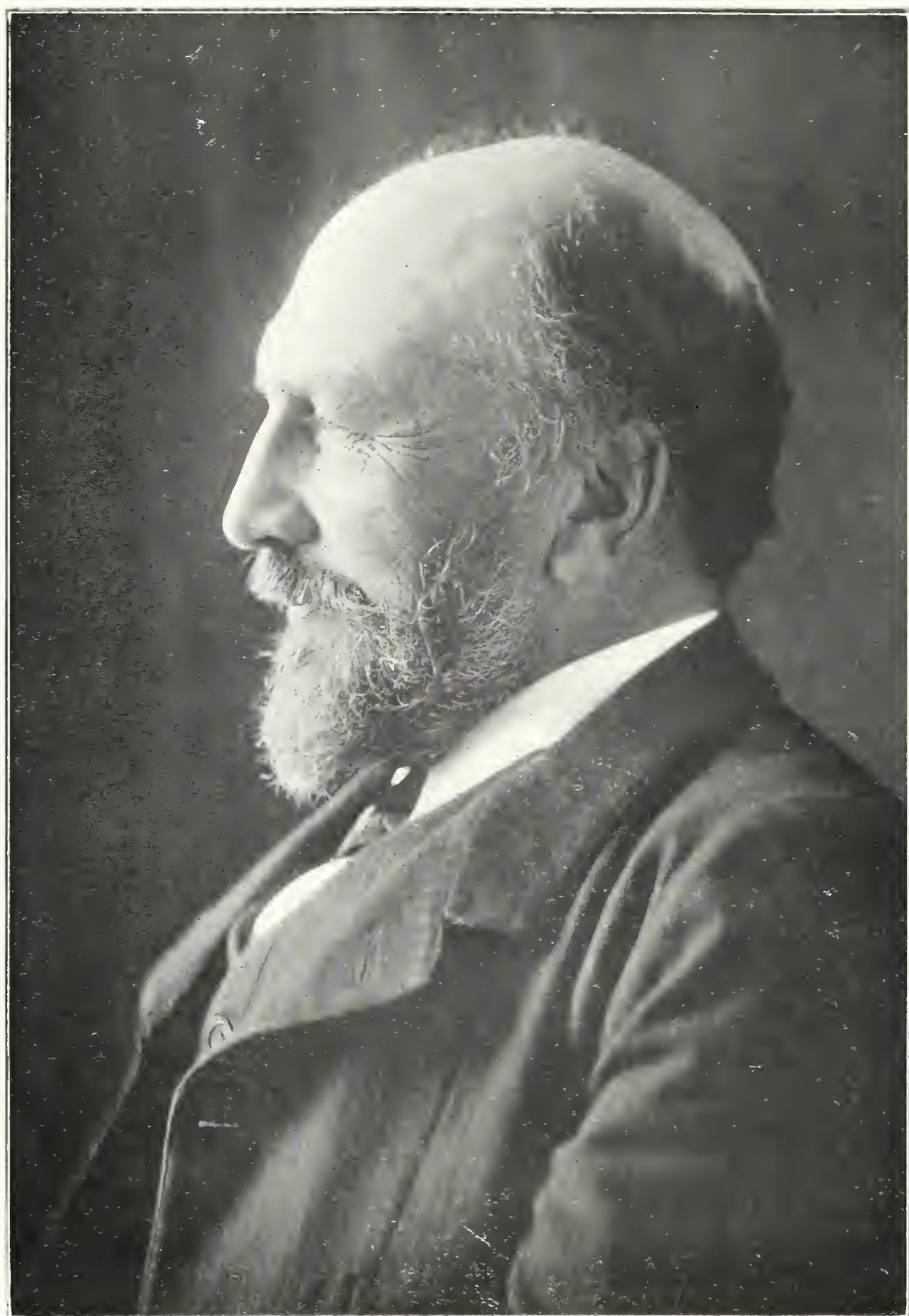
ANNUAL REPORT

FOR

MCMXIII.







TEMPEST ANDERSON, M.D., D.Sc.

ANNUAL REPORT

OF THE COUNCIL

OF THE

YORKSHIRE

PHILOSOPHICAL SOCIETY

FOR

MCMXIII.

PRESENTED TO THE ANNUAL MEETING,

FEBRUARY, 1914.



YORK:

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1914.

TRUSTEES
OF
THE YORKSHIRE MUSEUM,
APPOINTED BY ROYAL GRANT,
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CHAS. E. ELMHIRST.
SIR GEORGE GIBB, LL.B.
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OF THE
Yorkshire Philosophical Society.

HIS MAJESTY THE KING.

HER MAJESTY THE QUEEN.

QUEEN ALEXANDRA.

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For two years in place of DR. HITCHCOCK.

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MINERALOGY	- - - - -	H. M. PLATNAUER, B.Sc.
COMPARATIVE ANATOMY	- - - - -	
ORNITHOLOGY	- - - - -	J. BACKHOUSE, F.Z.S., M.B.O.U.
BOTANY	- - - - -	H. J. WILKINSON.
OBSERVATORY	- - - - -	DENNIS TAYLOR.
METEOROLOGY	- - - - -	THE REV. W. JOHNSON, B.A.
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T. W. POTTAGE.

Secretaries :

V. G. F. ZIMMERMANN.
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KEEPER OF THE MUSEUM :

OXLEY GRABHAM, M.A., M.B.O.U.

REPORT OF THE COUNCIL
OF THE
YORKSHIRE PHILOSOPHICAL SOCIETY,
FEBRUARY, 1914.

A year ago your Council commenced its Annual Report by congratulating the members on the completion and opening of the new Lecture Theatre. This year it is their painful duty to record the death of Dr. Tempest Anderson, the President of the Society, to whose generous influence we were indebted for the erection of the Hall, the formation of the Architectural Room, and many other improvements in the structure of the Museum. We have to go back to the year 1875, nearly 40 years, for the date when Dr. Tempest Anderson first became a member of the Yorkshire Philosophical Society. He was Honorary Curator of Comparative Anatomy since 1877, acted as Local Honorary Secretary to the British Association in 1881, when it held its Jubilee Meeting in York, was elected a Vice-President of our Society in 1887, Joint Honorary Secretary in 1897, and President in 1906, on the resignation of the late Sir Charles Strickland. During the whole of that time Dr. Tempest Anderson took the warmest interest in the welfare of our Society, and his lectures on the various Volcanoes, which he visited from time to time, and on which he was one of the leading authorities, added considerably to the reputation of our Society in the scientific world.

The last Council Meeting over which the late President presided, was on the 13th January, 1913, and shortly afterwards he started on a journey to the Phillipines, and an inspection of the great Volcano Krakatau. We had several letters from him, and though he complained of feeling the heat, he had returned as far

It is urgently requested that any discovery of Archæological interest in the neighbourhood may be brought to the notice of either the Chairman, Honorary Curators, or the Keeper of the Museum as early as possible.

The Keeper of the Museum will be pleased to give any information in his power, and may be seen daily, Museum engagements permitting.

Postcards of many of the most important antiquities may be obtained in the Museum at Two Pence each.

as the Red Sea, to attend the British Association Meeting at Birmingham, when he was struck down with sun-stroke on the 26th of August, near the entrance to the Suez Canal.

A Special Meeting of the Council was held on the 4th of September, over which the Dean of York presided, and the following resolution was passed :

“ That this Special Meeting of the Council of the Yorkshire Philosophical Society hereby places on record, at the earliest opportunity, the deep sense of the irreparable loss which the Society has sustained by the death of its President, Dr. Tempest Anderson, M.D., D.Sc., which occurred at or near Suez on the 26th August, as he was returning from a scientific expedition to the Phillipines. They would also record their grateful appreciation of his many acts of generosity and of the invaluable and devoted services which he had so ungrudgingly given to the Society, over a long course of years, and tender their heartfelt sympathy and condolence with his relatives on the loss which they have suffered.”

At the same Meeting it was unanimously decided that in future the new Lecture Theatre shall be called “ The Tempest Anderson Hall.” Our late President’s interest in the Society not only continued to the end of his life, but by his will he made generous provisions in its favour which will enable the Trustees and Council materially to increase the efficiency and usefulness of the Institution. A memoir giving a fuller description of our late President by Mr. G. Yeld will be found on page xxxvii of this Report.

Turning to the progress made during the last twelve months your Council would again acknowledge its indebtedness to Mr. Harvey Brook for his work on the South Wall of St. Mary’s Abbey and the Cloister adjoining. This work is in the best style of restoration, as it not only preserves the original work, but enables the Student to form a true conception of a very important feature of the Abbey, which had hitherto been largely left to the imagination. This is fully dealt with by Mr. Harvey Brook on page xvii of this Report.

The collection in the Architectural Museum has been further increased and the Council would again appeal to York Citizens not only to examine their Rockeries for fragments of mediæval sculpture, but to invite Mr. Harvey Brook to inspect them if they have any doubt as to their interest.

The Annual Meeting of the York Medical Society was held in the “ Tempest Anderson Hall” on the 29th of October, when Mr. Stephen Paget gave a most interesting address on “ Life and Death under the Microscope.” The Lecture was illustrated by

kinematograph views shewing not only the growth of plants but also the movement and action of germs and phagocytes in the blood.

The Annual Meeting of The Yorkshire Naturalists' Union was also held this year at the Museum when The Lord Mayor of York (Mr. Rhodes Brown) presided. An interesting Lecture was delivered by Mr. Harold Wager, and the Union was entertained by our Society.

The financial statement again shews a considerable deficiency on the year's workings. No outside painting had been done for seven years, and this has been thoroughly carried out. The Electric Light has been installed for lighting the Carriage Drive, and the necessary lamp standards have been provided. In the gardens the Terrace fronting the Aviaries has been completed and alterations have been made in some of the paths. All this has necessitated considerable expenditure resulting in a deficit on the year's workings of £246 4s. 9d., and the total balance due to the Treasurer is £309 7s. 3d. In view of the cessor of the Annuity to the Yorkshire Insurance Co., which expires in October next, and the prospective improvement of the Society's Income from other sources, your Council have felt justified in incurring this liability.

During the past year the Society has lost by death and resignation, 24 members, 7 Lady Subscribers and 4 Associates, whilst 41 new subscribers have joined the Society.

Your Council recommend Sir Joseph Sykes Rymer, Mr. Geo. Benson, Mr. H. J. Wilkinson, Mr. J. Triffit, and Mr. Arthur Rowntree as new Members of Council in the place of those retiring by rotation.

The Lectures delivered in the evenings were as follows:

Thursday, January 2nd.—“The Caucasus,” (with Lantern Illustrations). By the Rev T. T. Norgate.

Wednesday, January 15th.—“Unsinkable Ships,” (with Lantern Illustrations). By Sir William H. White, K.C.B., F.R.S.

Thursday, January 30th.—“Antiquities of Goathland and District,” (with Lantern Illustrations). By Oxley Grabham, M.A., M.B.O.U.

Thursday, February 15th.—“Curiosities of Musical Criticism,” (with Musical Illustrations). By Miss M. M. Paget, A.R.C.M., L.R.A.M.

Thursday, February 27th.—“Cogné and its Mountains,” (with Lantern Illustrations). By George Yeld, M.A., A.C.

Thursday, March 13th.—“The York Merchant Adventurers,” (with Lantern Illustrations). By Miss Maud Sellers.

Thursday, April 3rd.—“Town Planning,” (with Lantern Illustrations). By Raymond Unwin, F.R.I.B.A.

Thursday, April 17th.—The Members of the Photographic Section gave a Lantern Night.

Thursday, October 9th.—“The Colour Sense in Insects.” By Harold Wager, F.R.S.

Thursday, October 23rd.—“The Revolution in China, before and after.” By Philip Burtt.

Thursday, November 6th.—“San Marino, the Pigmy Republic.” By the Rev. T. T. Norgate.

Wednesday, November 19th.—“New Zealand and its Outlying Islands.” By Lord Plunket.

Thursday, December 4th.—“The Burial Places of our English Sovereigns.” By the Rev. Jocelyn Perkins.

Thursday, December 18th.—“The Riddle of Mars.” By Ellison Hawks.

Wednesday December 3rd.—The Members of the Photographic Section gave a Lantern Night of Autochrome Slides.

The following Papers were read at the Monthly Meetings of the Society during 1913 :

January 13th.—“Strata Smith” and his nephew Professor Phillips, 1769-1874. By Dr. J. S. Gayner.

March 10th.—“Through Iceland on Ponyback.” By the Rev. J. McIlvride.

April 14th.—“Gravitation.” By Dr. H. A. Phillips.

October 13th.—“The Astronomic Story of Creation.” By J. W. Davies.

November 10th.—Local Coinage.” By George Benson, A.R.I.B.A.

December 8th.—“Farming on the Wolds in 1641.” By Dr. J. S. Gayner.

ARCHÆOLOGY.—An extension of the Electric Theatre in Fossgate was projected to the boundary wall in the lane behind. The lower part of the wall was formed of fragments of mediæval masonry. One stone bore four shields, the two larger ones bearing respectively the arms of Neville and Skirlaw. Another stone was an angle bracket with the figure of an angel. Five others were parts of window mouldings. These were presented by the Directors. The stones evidently formed part of the building of the Carmelite monastery. There are other moulded stones in the wall but they were not removed.

From the excavations for the drain in the new street of Piccadilly, a stone depicted a bear's head muzzled, and another a part of a rich embattled ornament, were found and presented to the Museum by the contractor, Mr. C. Martin.

A Norman cap and a carved stone found in excavating at the rear of premises in Market Street, were presented by Mr. A. L. Schwabe.

Other additions to the Archæological Collection are recorded by Mr. Harvey Brook in another part of the Report.

BOTANY.—The specimens in the Herbarium are in good condition, especially those contained in the natural orders *Ranunculaceæ* to *Compositæ*.

The remaining orders (which include over four thousand specimens) require arranging and entering in the Catalogue.

No additions have been made during 1913.

GEOLOGY.—During 1913 the Strickland Collection has been examined and classified. The rearrangements made possible by the conveniences of the new Students' Room have called to light the wealth of duplicates in our possession. The Council have very wisely determined to distribute some of these among the chief schools of the City. This will doubtless help the teaching of elementary Geology, and may help to raise up workers in this department.

LIBRARY.—The Librarian reports that the re-arrangement of the books which was necessitated by the recent building operations, has now been completed. Some progress has been made with the index catalogue, the first portion of which will shortly be finished.

METEOROLOGY.—*Statistics of Station* :—Longitude, $1^{\circ} 5'$ W.; Latitude, $53^{\circ} 57'$ N.; height above mean sea level, 56 feet.

The weather of 1913, in strong contrast with that of the previous year, was marked by most agreeable conditions during the "holiday" months, July—September, during which only 2.56 inches of rain fell. This greatly helped both the health and prosperity of the people.

Temperature ranged in 1913 between 19° F., the average mean temperature was recorded on December 6th, when the absolute

minimum thermometer registered $19^{\circ}\text{F}.$, whilst the highest reading was observed on 3rd of August, the record being $82^{\circ}\text{F}.$ The range of temperature— $63^{\circ}\text{F}.$ —is thus much less than the previous year's, but the average is $9^{\circ}\text{F}.$ higher.

A *Mean Pressure* of 29.893 inches has been recorded as against 29.889 inches for 1912. January was lowest with 29.703 inches, March next with 29.714 inches, and November next with 29.754 inches. February was highest with 30.096 inches, July and August falling but little below. The extreme range of pressure was 2.05 inches, as compared with 1.81 inches in 1912, and 2.006 inches in 1911. The highest reading 30.71 inches was taken on February 12th, at 9 a.m., and the lowest 28.66 on March 19th, at 9 a.m.

Rain or Snow (0.005 inch or more) fell on 196 days, 4 fewer than in 1912, 13 more than in 1911. The total amount for the year was only 20.52 inches, a reduction of 12.49 inches as compared with 1912, an enormous difference in our small rainfall, the totals for 1911 and 1910 being 25.06 and 24.64 inches respectively. June, July, and August received 2.87 inches as compared with 14.38 inches in 1912. Our wettest months of the year were January, April, and October. The cumulative totals for the wettest months since 1841 are now—October 195.57 inches, August 193.98 inches, and July 178.13 inches. The heaviest fall occurred on January 1st, when 1.16 inch fell.

Observation of Winds show that during 1913 we have had "strong" winds on 43 days, and "calms" on 12 days. The chief winds have been S. (268), W. (241), N. (166), S.W. (100), E. (86), and N.W. (82). We have had 32 days of "clear" sky, 135 of "overcast," as against 148 in 1912, and 122 for 1911. We have had 8 thunderstorms, and 24 fogs, an acceptable improvement on the previous year. Snow fell on 11 days, as against 12 for 1912, and 10 for 1911.

Bright sunshine was observed for 1055.8 hours, as against 849 for 1912, and 1411 hours for 1911. This represents only 24% of what was possible, and is much behind the sunny year—1911.

NUMISMATICS.—The Hon. Curator reports that the collections are in good order.

OBSERVATORY.—The Museum Observatory continues in order, the Equatorial Telescope having been subjected to a complete overhauling of its working parts by Mr. Scott, last November. It is to be regretted that so very few members interested in Astronomy avail themselves of the Observatory, although it cannot be said to be as well situated for Astronomical observation as it used to be in the days before the N.E. Offices and Hotel, and other neighbouring buildings, were erected. For the currents of air rising from buildings and their chimneys are always detrimental to clear seeing.

ORNITHOLOGY.—All the collections are in good order, and are continually being added to. The aviaries are a great source of attraction not only to many of our members, but also to numerous visitors, as are also the Pea-fowl and the Ravens.

ZOOLOGY.—Additions are being steadily made to our fine series of skins and stuffed specimens of the smaller British Mammals, and the other Zoological collections are well looked after and are in good order.

FIELD NATURALISTS' SECTION.—The Committee of this section is pleased to report that they have had a successful year, although the excursions were not quite so well attended as those of 1912, still with an average attendance of 12 we have no cause to complain.

The first excursion took place on Wednesday, May 8th, when 17 members and friends visited Kirkham Abbey. After visiting the ruins, the party strolled along the bank of the Derwent and through Kirkham Woods. After tea, an informal meeting was held, when the finds of the day were reported; Mr. Wilkinson showed and explained several specimens of ranunculaceous plants which he had gathered during the afternoon. Nests of the cole-tit, treepipit, and grey wagtail were seen and left undisturbed.

A ramble to Tilmire took place on Saturday, June 11th, when the botanists reported having had a fairly good day, although owing to cultivation the mire had not the variety of plants now which it formerly had. A fox's earth was noticed by the zoologists, who also reported the absence of water-voles, which

was interesting in view of the universal frequency of this mammal round York.

On Saturday, July 5th, an excursion to Stamford Bridge took place in conjunction with the Yorkshire Naturalists' Union. The river was crossed at Buttercrambe Bridge and, by the kind permission of Major Collins, the members went through Aldby Park, famous as the residence of an old Yorkshire family—the Darleys, and of being the site of a Royal villa belonging to the King of Northumbria.

An evening ramble to Askham bogs took place on July 16th, when 11 members had a most enjoyable evening. What pleased them most was to find that the royal fern was still an inhabitant of that famous locality.

By kind permission of Lord Feversham, Beckdale was visited on August 9th; only 7 members attended that outing, and nothing fresh was reported.

An evening ramble—the last of the year—was held at New Earswick on September 3rd, when 8 members spent a pleasant hour in Dr. Gayner's garden. Mr. Gayner showed many interesting plants, amongst which were noticed the tulip tree, the wood sorrel, sea lavender, etc.; after viewing the garden, Mrs. Gayner kindly entertained the members with light refreshments.

The winter session was opened with the Presidential Address by Mr. W. Ingham. The lecture was entitled “A Sketch of Natural History Subjects.” As this was the first meeting following the death of Dr. Tempest Anderson, Mr. S. Smith moved—“That the Field Naturalists' Section of the Philosophical Society desires to place on record their appreciation of the services rendered to them and to science generally by Dr. Anderson, and express their regret at his untimely demise.” Mr. H. J. Wilkinson, in seconding the resolution, spoke very feelingly of the loss of Dr. Anderson, who, he said, was one always ready to give kind advice, and he was pleased to know the Yorkshire Philosophical Society had a perpetual memorial in the Tempest Anderson Hall. The resolution was carried unanimously.

At the following meeting Mr. W. Bellerby read a Paper on “English Flowers and Trees and their identification,”

illustrating his remarks with a large number of preserved plants; Mr. Geo. Machin told us about the "Nesting of the Sedge Warblers," eggs and nest of that bird being shown by Mr. Machin and Mr. V. Zimmermann.

An interesting Lecture was that given by Mr. F. W. Lockwood on "Earth Sculpture and Coast Erosion." Mr. Chas. Proctor spoke on "The Fish to be met with in the rivers and ponds of the Vale of York," and exhibited quite a variety of fish he had caught especially for this lecture, amongst which were specimens of bream, roach, pope, and gudgeon.

An interesting Paper was given by Mr. G. W. Phillips, who gave us his experience as "A Naturalist on the Footplate of a Locomotive." Mr. A. Whitaker, of Worsbrough Dale, near Barnsley, gave a Lecture on "The Hiding Places and Twilight Haunts of Bats," illustrating his remarks with upwards of 100 lantern slides.

The Annual Meeting of the Y. N. Union was held in the Tempest Anderson Hall on Saturday, December 13th, when 26 members of this Society were present.

On January 14th, Mr. A. E. Peck, F.L.S., of Scarborough, was to have given a Lecture on "Edible, Poisonous, and other interesting Fungi," but as he was taken ill the day previous, your Secretary arranged with Mr. Oxley Grabham who gave a Lecture on "The Birds of Yorkshire," illustrated by an excellent series of slides.

One of the most interesting Lectures during the past Session was that given by Mr. Harry Sowden, who told us about "The Life Histories of some Lepidopterous Insects."

Mr. Harwood Brierley gave an account of "The Cockle and Mussel Industries on the Lancashire and Lincolnshire Coasts"; the same evening, Mr. H. J. Wilkinson delivered a Paper on "Ranunculaceous Plants," exhibiting a large number of very fine specimens, some of which were collected over 50 years ago.

At the following meeting, Dr. Gayner gave a Paper on "Some Books on Geology," advocating the reading of "The Guide to the Geological Model of Ingleborough District," "The Age of the Earth," "Evolution of Plants," "Modern Geography," "Structure and Distribution of Coral Reefs," and "The Origin of Species."

Mr. E. W. Taylor dealt with "The Extinct Great Auk"; in the course of his remarks, the speaker said there were only 10 skeletons of this bird in existence, whilst of the 73 eggs 45 were in the British Isles.

Mr. F. B. Sissons gave a Lecture on "The British Finches," during the course of which he exhibited live specimens, in perfect plumage, of the hawfinch, bullfinch, goldfinch, greenfinch, brambling, mealy and lesser redpole, linnet, twite, and siskin, several of which had been lent by Mr. Zimmermann, who showed nests and eggs of the various species.

Mr. S. H. Smith gave a Lecture entitled "Snapshots by Fields and Woodlands"; and on April 22nd Papers were read by Mr. Benson on "The River Foss," and Mr. Ingham on "Peat Mosses."

With regard to our membership, we commenced the year with 81 members; during the year 1 lady and 9 gentlemen have been elected: 1 deceased, 4 resigned, and 8 struck off, leaving 77 on the books,—a decrease of 4 on the year.

PHOTOGRAPHIC SECTION.—Nineteen hundred and Thirteen marks an epoch in the history of the Photographic Section, a quarter of a century since its formation, in the regrettable loss of Dr. Tempest Anderson, who for twenty-four years filled the position of President. Our late President, before his departure for Java, on behalf of himself and members of this Section, invited the members of the Yorkshire Photographic Union to visit the Museum and grounds, on the occasion of their visit to York; on June 21st, 1913, tea was provided for 350 visitors, as requested by Dr. Tempest Anderson. This was the largest gathering of the Yorkshire Photographic Union since its formation, fifteen years ago. Their President, speaking on behalf of himself and members generally, regretted that Dr. Anderson was not with them on such a memorable occasion, as this meeting would long be remembered by all members present.

The number of our members is steadily on the increase, although we have lost some by resignation and departure.

In the Spring of 1913, the Yorkshire Union Print Portfolio prints were on view in the Hall; George Kirby lectured on

“Turner and his Art”; John Mackintosh, F.R.P.S., in Autochrome on “The Thames from its Source to the Sea.”

At the opening of the Autumn Session, Lectures were given by T. W. Pottage, on “In and around York,” (Autochromes); and by Henry Coning, on “Holiday Tours on our English Coast.” The members of the Photographic Section gave a Lantern night of Autochrome slides. This marks a new field in the future of the Section.

During the past year the lectures of the Photographic Section have been open to the members of the Philosophical Society. This has been greatly appreciated by them, as shewn by the large number attending the lectures. We hope that they will still continue to induce younger members of their families to join us and add further to the success and usefulness of photography generally, as all our Photographic lectures are open to all members of the Society.

Full particulars and terms of membership as well as other information desired will be readily furnished by the Secretaries.

ENTOMOLOGY.—The Hon. Curator reports that all the collections are in good order.



EXCAVATION OF CLOISTER & RESTORATION OF
SOUTH NAVE WALL, &c., &c.

Report of Work Done, 1913.

By W. HARVEY BROOK.

THE work of thoroughly excavating and partially re-building a portion of the North and East Cloister alleys, which is mentioned in our last report as proceeding, has now been brought to a conclusion for the present, the result being that three-and-a-half bays of the South wall of the nave of the Abbey, and two bays of the West wall of the South transept have been rescued from almost total oblivion. These walls had been destroyed in great part when the gardens were laid out in 1828, and their reinstatement has done much to render the plan of the church and cloister intelligible to visitors.

The earth has been taken out to the ancient floor levels, and in doing this, the pent wall of the enclosure of the cloister garth, upon which the open arcade stood, was found running the whole length, South and West, to a varying height above the ground level of from one to three courses and one foot eleven inches thick ; this wall has been raised to the height of 2ft. 6in. and made the old width ; thus, with the restored South wall of nave and West wall of South transept, the ancient width and general dimensions of cloister alleys is now seen, and can be measured by the curious.

The South wall of nave with its buttresses and vault-shaft bases, and seating, has been raised to a general height of 3ft. 3in. from cloister floor level, except in the eighth bay next transept wall, where it is raised to a height of 5ft. 6 $\frac{1}{2}$ in. In this bay the five steps of the South-east door of the nave giving access to the cloister from the church, have been re-built, and the step forming the threshold is exactly the level of the old floor of the Abbey nave ; this wall has been in great part re-built and to its original thickness, 5ft. 8in. at the foot and 4ft. 10in. at the ground level, it is 68 feet in length, with old ashlar, new stone only being used in cases of necessity. The bases of vault-shafts and pieces of seating and moulding were found

during excavation and on the various rockeries in our gardens and those of the Blind School; many of the stones bear interesting masons' marks. In the same way the West wall of the South transept has been treated, built to the old width and heightened; it serves also as a retaining wall for the grass mound which forms the entrance to the Lecture Theatre from the gardens. Where the garden path crosses the cloister alley at its western end a rockery has been formed and covered with plants and moss, to act as a barrier to keep persons from falling into the lower level of the cloister.

Upon the removal of the stump of the old elm tree, blown down in a gale the previous year, an excavation was made, for the tree stood upon the line of the old South wall of nave; on the removal of the earth, the wall and two buttresses of the third and fourth bays of nave were found in excellent preservation, regret being generally expressed that they too were not left exposed.

There can be little doubt that the whole of the remains of the South wall of the nave with cloister alley should some day be excavated and treated as the work just concluded, this would then give a proper importance to the Abbey ruins which they ought to possess.

In presenting the result of his work to the Society, Mr. Brook wishes to thank all those who were kind enough to give him old ashlar and other material for the work, especially Mr. A. B. Norwood, who has been a great benefactor, and the Very Rev. the Dean of York, who between them gave several loads of ashlar, much of which was Abbey stone: the difficulty has been to provide sufficient ancient ashlar, many tons of which has been used. He would also thank the contractors, Messrs. Biscomb, who so ably carried out the work for him. The only, and it is the very deepest regret to him, has been that our dear old friend, Dr. Tempest Anderson, was not spared to come home to see the alterations in the gardens.

A few additions to the collection in the Architectural Museum have been made, some ancient Norman pieces of work from Piccadilly and Fossgate, and the fine doorway of perpendicular work has been pieced together in the entrance of the Architectural Museum.

METEOROLOGICAL STATION, YORK.—THE MUSEUM.

Longitude $1^{\circ} 5'$ W., Latitude $53^{\circ} 57'$ N. Height above Mean Sea Level 56 ft. Gravity Correction + 0.24 in.

1913.	Air Temperature.						Humidity.						Earth Temp.			
	Mean Pressure at 32° Fahrenheit.			Means of Max. and Min.			Deprn. of Wet Bulb.			Tension of Vapour.			Percentage.			
	At Station Level.	At M. S. Level	9 a.m.	9 p.m.	Mean.	Max.	Min.	Day.	9. am.	9 p.m.	Mean.	9 a.m.	9 p.m.	Mean.	At 1 ft.	At 4 ft.
Jan.	29.703	29.762	37.4	38.1	37.75	42.8	34.3	38.6	52	7th	22	13th	0.8	0.8	0	0
Feb.	30.096	30.156	38.6	39.5	39.05	46.5	34.6	40.6	54	8th	28	20th	1.6	1.7	1.65	1.7
Mar.	29.714	29.773	42.0	41.9	41.95	48.9	36.9	42.9	57	4th	25	17, 18	2.3	2.1	2.35	2.17
April	29.792	29.849	47.4	44.9	46.15	53.6	39.7	46.7	65	23rd	30	11, 12	3.4	2.8	3.1	2.49
May	29.857	29.914	53.8	50.8	52.3	61.5	45.3	53.4	78	30th	38	6th	3.9	2.7	3.3	3.11
June	29.996	30.053	59.4	55.6	57.5	66.9	50.1	58.5	79	17th	43	9th	4.9	3.3	4.1	3.63
July	30.032	30.089	58.5	56.0	57.25	65.4	51.6	58.5	75	29th	45	8, 23	3.8	2.7	3.25	3.78
Aug.	30.016	30.073	59.0	57.4	58.2	68.5	50.5	59.5	82	3rd	40	5th	4.1	3.4	3.75	3.77
Sept.	29.957	30.014	57.8	56.1	56.95	66.4	50.2	58.3	79	27th	36	17th	3.2	2.8	3.0	3.86
Oct.	29.814	29.871	50.3	50.5	50.4	57.4	45.2	51.3	63	17th	31	24th	2.2	1.8	2.0	3.09
Nov.	29.754	29.812	45.6	46.6	46.1	52.0	41.8	46.9	58	17th	31	6th	1.8	2.1	1.95	2.66
Dec.	29.980	30.040	39.4	40.1	39.75	45.2	36.2	40.7	55	9th	19	31st	1.5	1.55	2.10	2.17
Year	29.893	29.951	49.1	48.1	48.6	56.3	43.0	49.7	82	Aug.	19	Dec.	2.8	2.3	2.55	2.90

STATION, YORK.—THE MUSEUM.

Heights above Ground :—Barometer, 3 feet ; Thermometers, 4 feet ; Rain-gauge, 1 foot.

XX

1913.	Amount of Cloud.			Rainfall.			Weather, No. of Days of			Wind, No. of Observations of														
	9 a.m.	9 p.m.	Mean	Total.	Max.	Day.	Bar.	Falling.	Snow.	Wind.	Cloud.	Gale.	Fog.	Cast.	Over.	Clear.	Cloudy.	Overcast.	Cloudy.	Wind.	W.	N.W.		
				ins.	ins.	11th	22	4	0	0	0	3	3	2	6	12	0	8	19	36	7	6	2	
Jan.	8.0	7.0	7.5	3.19	1.16	11th	22	4	0	0	0	3	3	2	6	12	0	8	19	36	7	6	2	
Feb.	5.9	5.7	5.8	0.63	0.26	7th	15	0	0	0	0	3	2	6	12	6	2	22	12	19	19	2		
Mar.	6.2	6.5	6.35	2.08	0.28	29th	24	2	0	0	2	18	5	2	4	3	24	22	27	27	6			
April	6.4	5.7	6.05	2.83	0.48	11th	19	1	0	2	3	10	0	0	5	22	3	3	33	8	13	5		
May	6.1	5.9	6.	1.97	0.56	8th	15	0	2	2	2	9	0	0	0	0	0	8	11	13	8	22	6	
June	6.3	6.0	6.15	1.48	0.39	17th	16	0	0	2	4	9	2	0	3	1	3	9	7	17	9	29	12	
July	7.7	7.2	7.45	0.44	0.25	6th	6	0	0	0	1	17	1	0	0	2	31	3	11	3	8	1	21	15
Aug.	6.8	6.9	6.85	0.85	0.27	22nd	9	0	0	1	0	12	0	0	3	0	24	6	7	2	9	8	19	15
Sept.	6.6	6.6	6.6	1.27	0.65	17th	11	0	0	1	11	2	0	0	0	0	0	21	15	8	13	24	2	3
Oct.	5.3	7.1	6.2	2.36	0.52	3rd	15	0	0	1	5	10	3	0	0	0	0	13	11	16	6	40	3	2
Nov.	6.0	6.4	6.2	2.09	0.31	10, 15	22	0	0	0	3	9	4	0	0	5	0	0	0	0	4	25	11	42
Dec.	6.9	6.8	6.85	1.33	0.44	29th	11	4	0	0	2	11	0	0	0	0	5	23	4	1	0	8	11	42
Year	6.5	6.5	6.5	20.52	1.16	Jan. 1	185	11	2	8	32	135	24	0	12	43	166	70	86	70	268	100	241	82

RIVER HEIGHT RECORDS REGISTERED BY THE AUTOMATIC RECORDER
AT THE GUILDHALL, YORK, 1913.

Date	JANUARY.		FEBRUARY.		MARCH.		APRIL.		MAY.		JUNE.	
	Time.	Above or below S.L.	Time.	Above or below S.L.	Time.	Above or below S.L.	Time.	Above or below S.L.	Time.	Above or below S.L.	Time.	Above or below S.L.
1	noon	2 ft. 11 in.	12 p.m.	5 ft. 1 in.	noon	0 ft. 1 in.	9 a.m.	2 ft. 3 in.	1 a.m.	5 ft. 10 in.	noon	0 ft. 3 in.
2	1 a.m.	2 ft. 3 in.	"	2 ft. 5 in.	"	river drawn off	7 p.m.	2 ft. 5 in.	"	3 ft. 3 in.	"	0 ft. 4 in.
3	"	1 ft. 8 in.	"	5 ft. 3 in.	"	"	1 a.m.	1 ft. 9 in.	"	2 ft. 8 in.	"	0 ft. 4 in.
4	12 p.m.	1 ft. 6 in.	"	7 ft. 2 in.	"	"	4 p.m.	1 ft. 6 in.	5 p.m.	1 ft. 9 in.	"	0 ft. 3 in.
5	"	3 ft. 2 in.	"	4 ft. 6 in.	1 a.m.	5 ft. 9 in.	11 a.m.	1 ft. 6 in.	"	2 ft. 0 in.	"	0 ft. 3 in.
6	10 a.m.	5 ft. 10 in.	"	2 ft. 8 in.	"	"	1 a.m.	1 ft. 3 in.	"	1 ft. 7 in.	"	0 ft. 3 in.
7	5 p.m.	3 ft. 3 in.	"	5 ft. 3 in.	"	"	noon	0 ft. 2 in.	"	3 ft. 10 in.	"	0 ft. 3 in.
8	2 a.m.	3 ft. 6 in.	"	8 ft. 5 in.	"	"	12 p.m.	0 ft. 9 in.	7 p.m.	3 ft. 10 in.	"	0 ft. 4 in.
9	1 a.m.	2 ft. 2 in.	"	5 ft. 12 p.m.	"	"	10 p.m.	0 ft. 7 in.	11 p.m.	2 ft. 9 in.	"	0 ft. 3 in.
10	"	1 ft. 5 in.	2 a.m.	5 ft. 10 p.m.	"	"	noon	0 ft. 6 in.	12 p.m.	6 ft. 3 in.	"	0 ft. 3 in.
11	"	0 ft. 10 in.	1 a.m.	3 ft. 8 in.	"	"	12 p.m.	0 ft. 6 in.	2 p.m.	7 ft. 10 in.	"	12 p.m.
12	noon	0 ft. 8 in.	"	2 ft. 2 in.	"	"	12 p.m.	0 ft. 5 in.	12 p.m.	3 ft. 8 in.	"	1 p.m.
13	12 p.m.	0 ft. 11 in.	2 p.m.	1 ft. 1 in.	"	"	9 p.m.	10 ft. 0 in.	10 p.m.	2 ft. 0 in.	"	7 p.m.
14	6 a.m.	1 ft. 0 in.	1 a.m.	1 ft. 4 in.	"	"	6 p.m.	1 ft. 5 in.	10 p.m.	1 ft. 2 in.	"	5 p.m.
15	12 p.m.	2 ft. 1 in.	"	1 ft. 0 in.	"	"	12 p.m.	1 ft. 2 in.	12 p.m.	1 ft. 3 in.	"	6 p.m.
16	11 p.m.	3 ft. 8 in.	noon	0 ft. 9 in.	"	"	9 p.m.	1 ft. 2 in.	noon	1 ft. 3 in.	"	3 p.m.
17	12 p.m.	2 ft. 5 in.	1 a.m.	0 ft. 8 in.	"	"	5 p.m.	6 ft. 2 in.	2 p.m.	1 ft. 3 in.	"	2 p.m.
18	"	1 ft. 8 in.	noon	0 ft. 6 in.	1 a.m.	2 ft. 0 in.	noon	0 ft. 2 in.	12 p.m.	1 ft. 2 in.	"	1 p.m.
19	"	2 ft. 1 in.	1 a.m.	0 ft. 6 in.	12 p.m.	3 ft. 2 in.	10 a.m.	4 ft. 2 in.	10 p.m.	1 ft. 0 in.	"	2 p.m.
20	"	4 ft. 0 in.	12 p.m.	0 ft. 2 in.	noon	5 ft. 0 in.	12 p.m.	4 ft. 1 in.	9 a.m.	0 ft. 7 in.	"	0 p.m.
21	"	6 ft. 11 in.	noon	0 ft. 2 in.	1 a.m.	4 ft. 3 in.	12 p.m.	1 ft. 0 in.	7 p.m.	0 ft. 6 in.	"	2 p.m.
22	10 a.m.	7 ft. 1 in.	"	0 ft. 1 in.	8 a.m.	2 ft. 5 in.	9 p.m.	0 ft. 7 in.	"	6 ft. 6 in.	"	0 p.m.
23	1 a.m.	5 ft. 7 in.	"	0 ft. 1 in.	12 p.m.	6 ft. 9 in.	12 p.m.	0 ft. 7 in.	"	5 ft. 6 in.	"	2 p.m.
24	12 p.m.	8 ft. 2 in.	"	0 ft. 2 in.	9 p.m.	4 ft. 6 in.	11 p.m.	0 ft. 7 in.	"	12 p.m.	"	12 p.m.
25	"	9 ft. 10 in.	"	0 ft. 2 in.	11 p.m.	2 ft. 0 in.	noon	0 ft. 6 in.	12 p.m.	5 ft. 6 in.	"	5 p.m.
26	4 a.m.	9 ft. 11 in.	"	0 ft. 2 in.	12 p.m.	2 ft. 3 in.	12 p.m.	1 ft. 6 in.	12 p.m.	10 ft. 5 in.	"	4 p.m.
27	1 a.m.	7 ft. 1 in.	"	0 ft. 2 in.	"	"	noon	0 ft. 5 in.	9 p.m.	7 ft. 9 in.	"	0 p.m.
28	2 a.m.	2 ft. 9 in.	"	0 ft. 2 in.	"	"	3 p.m.	0 ft. 4 in.	noon	0 ft. 3 in.	"	2 p.m.
29	10 p.m.	3 ft. 8 in.	"	0 ft. 2 in.	"	"	noon	0 ft. 5 in.	10 p.m.	7 ft. 10 in.	"	2 p.m.
30	12 p.m.	2 ft. 9 in.	"	0 ft. 2 in.	"	"	3 p.m.	0 ft. 5 in.	9 p.m.	7 ft. 9 in.	"	3 p.m.
31	10 p.m.	8 ft. 5 in.	"	0 ft. 2 in.	"	"	12 p.m.	0 ft. 2 in.	9 p.m.	5 ft. 7 in.	"	0 p.m.

RIVER HEIGHT RECORDS.—*Continued.*

Date.	JULY.		AUGUST.		SEPTEMBER.		OCTOBER.		NOVEMBER.		DECEMBER.	
	Time.	Above or below S.L.	Time.	Above or below S.L.	Time.	Above or below S.L.	Time.	Above or below S.L.	Time.	Above or below S.L.	Time.	Above or below S.L.
1	noon	0 1	noon	below 0	noon	below 0	1 a.m.	0 1	10 p.m.	0 11	noon	1 6
2	"	S.L.	S.L.	S.L.	"	"	moon	0 1	9 p.m.	0 9	12 p.m.	0 11
3	"	S.L.	S.L.	S.L.	0 2	0 2	1 a.m.	0 2	12 p.m.	1 5	1 a.m.	1 0
4	"	S.L.	S.L.	S.L.	0 2	0 2	5 "	0 2	6 a.m.	1 7	9 p.m.	3 3
5	"	S.L.	S.L.	S.L.	0 2	0 2	noon	0 2	1 a.m.	1 5	12 p.m.	1 6
6	"	S.L.	S.L.	S.L.	0 2	0 2	5 "	0 2	noon	1 0	5 "	0 11
7	"	S.L.	S.L.	S.L.	0 2	0 2	6 "	0 6	S.L.	1 6	6 p.m.	0 9
8	1 a.m.	0 1	1 a.m.	0 1	0 2	0 2	1 a.m.	0 2	S.L.	0 9	noon	0 9
9	noon	0 5	noon	0 5	0 2	0 2	5 "	0 5	above 1	6	8	6 p.m.
10	"	0 1	"	0 1	0 2	1 a.m.	0 2	2	2	0 9	9	2
11	"	S.L.	S.L.	S.L.	0 2	0 2	6 p.m.	0 9	10 p.m.	1 5	12 p.m.	1 4
12	"	below 0	2	"	0 2	0 2	noon	0 7	12 p.m.	1 6	2	0 11
13	"	0 2	"	0 2	0 2	6 p.m.	0 8	below 0	4	2	5 "	1 2
14	"	0 2	"	0 2	0 2	noon	0 6	0 4	4	12 p.m.	0 11	0 10
15	"	0 2	"	0 2	0 3	1 a.m.	0 5	1 a.m.	0 4	noon	1 2	8
16	"	0 2	"	0 2	0 3	noon	0 1	5 "	above 0	6	12 p.m.	5
17	"	0 2	"	0 2	0 2	2	5 p.m.	2	5 p.m.	2	1 a.m.	1 2
18	"	0 2	"	0 2	0 2	2	noon	0 2	below 0	5	10 a.m.	0 9
19	"	0 3	"	0 3	0 2	2	6 p.m.	0 7	12 p.m.	0 5	1 a.m.	0 8
20	"	0 3	"	0 2	0 2	2	6 p.m.	0 3	1 a.m.	0 4	12 p.m.	0 8
21	"	0 2	"	0 2	0 2	2	6 p.m.	0 0	7 a.m.	0 6	0	0 7
22	"	0 2	"	0 2	0 2	2	6 p.m.	0 3	1 a.m.	0 6	5 "	0 6
23	"	0 2	"	0 2	0 2	2	6 p.m.	0 0	noon	0 5	5 "	1 9
24	"	0 2	"	0 2	0 2	2	6 p.m.	0 6	above 0	6	5 "	1 5
25	"	0 2	"	0 2	0 2	2	6 p.m.	0 3	5 "	0 5	12 p.m.	1 9
26	"	0 2	"	0 2	0 2	2	6 p.m.	0 0	0 5	0 5	6 p.m.	0 6
27	"	0 2	"	0 2	0 2	2	6 p.m.	0 3	0 5	0 5	12 p.m.	0 6
28	"	0 2	"	0 2	0 2	2	6 p.m.	0 8	0 5	0 5	noon	0 1
29	"	0 2	"	0 2	0 2	2	6 p.m.	0 4	10 p.m.	0 10	noon	0 10
30	"	0 2	"	0 2	0 2	2	6 p.m.	0 0	6 p.m.	0 8	noon	0 8
31	"	0 2	"	0 2	0 2	2	6 p.m.	0 0	12 p.m.	0 8	noon	0 8

OUSE FLOODS FROM RETURNS TO THE CITY SURVEYOR.
COMPARATIVE TABLE, 1913.

Date.	Nidd at Pateley Bridge.		Ure at Middleham Bridge.		Swale at Richmond.	
	Hour.	Height ft. in.	Hour.	Height ft. in.	Hour.	Height ft. in.
Jan. 21					4-30 p.m.	2 6
," 23			5 p.m.	5 0		
," 24			10 p.m.	8 0	4 p.m.	4 10
," 25			9 a.m.	5 0		
," 31			9 a.m.	6 0		
Feb. 3			11 a.m.	6 6		
," 4			9 a.m.	8 6		
," 8			9 a.m.	8 0		
Mar. 3			4-30 p.m.	12 6		
," 19			6 p.m.	4 6		
Apr. 16			9 a.m.	9 6		
," 27			3 p.m.	8 0	4 p.m.	4 6
May 10			9 a.m.	4 6		
Nov. 3			10 a.m.	3 0		
," 16			4 p.m.	4 0		
," 18			5 p.m.	9 0		
," 21			8 a.m.	9 0		
Dec. 26			5 p.m.	6 6		

YORK--THE MUSEUM.
BAROMETER AT 32° AND M.S.L.

1913.	Highest Barometer.		Lowest Barometer.		Month.	Total Hours.		Percentages.
	1913.	1913.	1913.	1913.		1913.	1913.	
January	30.38	26th, 9 a.m.	29.00	30th, 9 p.m.	January	9	3	10
February	30.71	12th, 9 a.m.	29.45	7th, 9 p.m.	February	40	15	15
March	30.39	8th, 9 p.m.	28.66	19th, 9 a.m.	March	82	23	19
April	30.35	3rd, 9 p.m.	29.23	16th, 9 a.m.	April	89	21	46
May	30.35	14th, 9 p.m.	29.45	4th, 9 a.m.	May	155	32	29
June	30.40	{ 29th, 9 p.m. 30th, 9 p.m.	29.53	10th, 9 a.m.	June	177	35	23
July	30.41	1st, 9 a.m.	29.75	6th, 9 a.m.	July	112	22	16
August	30.33	26th, 9 a.m.	29.71	30th, 9 a.m.	August	130	29	15
September	30.46	7th, 9 a.m.	29.34	14th, 9 a.m.	September	131	35	27
October	30.43	13th, 9 a.m.	29.20	29th, 9 p.m.	October	77	24	22
November	30.37	22nd, 9 p.m.	29.10	13th, 9 a.m.	November	37	15	12
December	30.69	20th, 9 p.m.	28.99	3rd, 9 p.m.	December	18	8	2
Year	30.71	Feb. 12th, 9 a.m.	28.66	Mar. 19th, 9 a.m.	Year	1057	24	21

YORK (BOOTHAM)--SUNSHINE VALUES.

	1913.		1913.		Month.	Total Hours.		Percentages.
	1913.	1913.	1913.	1913.		1913.	1913.	
					January	9	3	10
					February	40	15	15
					March	82	23	19
					April	89	21	46
					May	155	32	29
					June	177	35	23
					July	112	22	16
					August	130	29	15
					September	131	35	27
					October	77	24	22
					November	37	15	12
					December	18	8	2
					Year	1057	24	21

THE TREASURER'S ACCOUNT IN CONNECTION WITH THE FUND FOUNDED BY THE LATE WM. REED, ESQ., FOR SPECIFIC PURPOSES.

INCOME.	Cr.	EXPENDITURE.	Cr.
Interest on £600 York Corporation 3% Redeemable Stock, less Income Tax ...	£ s. d.	Books and Binding ...	£ s. d.
...
Interest on £50 placed on Deposit with the London Joint Stock Bank Ltd.	... ... ...	16 19 0	16 19 0
...
		1 5 0	1 5 0
		£18 4 0	£18 4 0

	£	s.	d.
..	600	0	0
..	50	0	0
..	37	19	2
	<hr/>		
	26687	19	2

EDWIN GRAY, Hon. Treasurer.

PHILIP L. NEWMAN.

Examined and found correct.

THE TREASURER IN ACCOUNT WITH THE YORKSHIRE

Previous Year.	Dr.	INCOME.	£	s.	d.	£	s.	d.	
<i>Subscriptions:</i>									
	Town Members	...	...	...	...	...	611	15	0
	Country Members	...	...	...	...	...	9	0	0
	Lady Subscribers	...	...	...	...	...	69	10	0
	Associates	...	...	...	...	...	21	0	0
	Arrears received	...	...	...	...	...	40	0	0
	Keys of Gates	...	...	...	...	...	62	10	0
779									813 15 0
	31 Donation	...	...	...	...	...			1 0 0
<i>Rents:</i>									
	Major Allenby—St. Mary's Lodge	...	...	...	...	...	65	0	0
	Mr. Hill—Marygate Baths	...	...	...	...	...	40	0	0
	York Waterworks Co.—Shed	...	...	...	...	...	15	0	0
	Do. Light	...	...	...	...	...	0	1	0
	Corporation of York—Lease of Exhibition Land	...	...	...	...	...	2	0	0
	Post Office—Wayleaves	...	...	...	...	...	1	2	0
	Letting of Rooms for Lectures and Meetings	...	...	...	...	...	39	12	0
160									162 15 0
	Whitsuntide Admission Fees	...	...	...	...	...	13	5	7
	Less: Attendants	...	...	...	...	...	3	9	0
	Fixing and Removing Barricades	...	...	...	...	...	0	16	0
									4 5 0
									9 0 7
	2 Sale of Catalogues and Plans	...	...	...	...	...			2 12 6
	1 Sale of Books, etc.	...	...	...	...	...			1 0 3
	6 Bank Interest (See Contra)	...	...	...	...	...			0 8 0
	238 Gate Money	...	...	...	...	...			249 16 7
	Interest on £918 8s. 9d. India 3% Stock, less Income Tax	...	...	...	...	...			25 19 0
	Hire of Tent and Tables	...	...	...	...	...	6	0	0
	Less: Cost of Repairs	...	...	...	...	...	1	0	7
3									4 19 5
	10 Meteorological Department—Grant from Corporation of (2 years) York	...	...	...	...	...			5 0 0
									1276 6 4
	242 Excess of Expenditure over Income	...	...	...	...	...			246 4 9
									1522 11 1
	Excess of Expenditure over Income, 1913	...	...	...	...	...			246 4 9
	Balance due to the Treasurer, 31st December, 1912	...	...	...	...	...			63 2 6
									£309 7 3

Examined and found correct,

PHILIP L. NEWMAN,

EDWIN GRAY,

Hon. Treasurer.

PHILOSOPHICAL SOCIETY FOR YEAR ENDING 31ST DEC., 1913.

Previous Year.	EXPENDITURE.								Cr.	
	£	s.	d.	£	s.	d.				
Crown Rent									1	0
Corporation Rent									18	19
<i>Rates and Taxes :</i>										
Property Tax and City Rates								47	3	2
Waterworks Company's Rate								8	2	4
Gardeners' Licenses								3	0	0
Receipt and Cheque Books Stamping								2	1	4
60									60	6
<i>Insurance :</i>										
Fire Premium								8	8	0
Employers' Liability Premium								2	7	0
National Health Insurance Contributions								3	18	0
12									14	13
8 Telephone Rent and Calls									7	16
<i>Salaries and Wages :</i>										
Museums								357	2	0
Lodge and Gardens								341	9	2
684									698	11
132 *Yorkshire Insurance Company Ltd., Annuity									132	12
<i>General Additions, Repairs, and Expenses :</i>										
Museums								24	4	1
<i>ESTATE—</i>										
Electrical Installation and Lamp Standards	67	0	9							
Painting	53	10	3							
Joiners' Work	46	2	8							
Various	13	17	0							
<i>GARDENS—</i>										
Ordinary additions and Repairs	72	12	6							
Cost of completion of Terrace in front of Aviary (including Turf for same) and repairs to Footpaths, &c., after excavations ...	78	3	3							
								150	15	9
340									355	10
15 Library—Books and Binding									8	8
28 Lectures									45	10
Refreshments provided after Lectures and Meetings ...									19	18
6 Printing and Stationery									11	16
Printing Communications to Members and Postage of ...										
8 same									6	3
52 Printing Reports and Postage thereof									27	15
<i>Gas, Coal, Coke, and Electricity :</i>										
17 Gas								18	4	10
80 Coal and Coke and Cartage								67	10	5
10 Electricity								4	18	10
										90
16 Antiquities, Coins and Pottery										14
7 Sundry Postages										6
Bank Interest (See Contra)										7
13 Sundries										8
										0
										1
Balance due to the Treasurer, 31st December, 1913 ...									309	7
										3
									£309	7
										3

* Annuity payable until October, 1914, inclusive, created to repay an advance of £3500 made by The Yorkshire Insurance Co. Ltd.

Principal repaid ... ...	...	...	3370	15	5
," outstanding ... ...	...	...	129	4	7
			£3500	0	0

NEW MEMBERS ELECTED, 1913.

Bairstow, Dr. E. O., 1, Minster Court.
 Boomer, Chas. E., Prospect House, De Grey Street.
 Border, R. C., The Laurels, Clifton.
 Cattley, Miss, 43, Main Avenue, Heworth.
 Clayton, Thos., Old Rectory House, Chapter House Street.
 Dixon, F. H., Grove House, St. John Street.
 Gale, Robt. J., "Sandroyd," Wigginton Road.
 Gregg, Rev. I. F. H. C., 31, St. Paul's Square.
 Harding, Sidney, 34, Queen Anne's Road.
 Jackson, Wm. Edwd., The Lawn, Clifton.
 Jesper, Wm. A., Claremont, Marygate.
 Kay, Alfred, 24, Gillygate.
 Lamb, Mrs., Colliergate.
 Mennim, F. A., 5, Sycamore Terrace.
 Miskin, Jas. B., 50, Queen Anne's Road.
 Pearson, W. A., 57, Bootham.
 Sowray, W., 57, Petergate.
 Stanhope, E., 17, Coney Street.
 Sutton, Mrs. E. J., The Laurels, Queen Anne's Road.
 White, Col. W. A., Clifton Green.
 Winspear, Walter, 57, Coney Street.
 Wood, H. H., 27, Queen Anne's Road.

NEW LADY SUBSCRIBERS.

Burton, Mrs., "Wednesfield," Acomb.
 Dobie, Mrs., 10, St. Mary's.
 Edwards, Miss, The Penitentiary.
 Lane, Mrs., Portland Street.
 Leaf, Miss Mabel, 18, Park Place.
 Male, Miss, The Dispensary.
 Masterman, Mrs., 64, St. John Street.
 Peters, Miss, 33, Queen Anne's Road.
 Sharp, Mrs., 51, Fossgate.
 Taylor, Mrs. Jane, 10, Queen Anne's Road.
 Watson, Miss C. C., 17, Sycamore Place.
 Woodhouse, Mrs., 7, Burton Stone Lane.

NEW ASSOCIATES.

Cook, R. B., St. John Street.
Davis, Jas. W., Sunnyside, Fulford.
Lucas, C. Cecil, 2, The Avenue, Clifton.
Newman, Rev. F. S., 16, Grosvenor Terrace.
Pearce, John, 5, Lendal.
Preston, Henry, 19, Bootham Terrace.
Sutton, Fredk. G., 50, Stonegate.

DEATHS.

MEMBERS.

Anderson, Tempest, M.D., Stonegate.
Foster, Lancelot, Bootham.
Jesper, Alfred, Micklegate.
Walker, R., Stonegate.

LADY SUBSCRIBERS.

Deighton, Mrs., The Mount.
Egerton, Miss Mary, The Cliff, Terrington.
Husband, Miss, Clifton.

ASSOCIATE.

Clark, E. F., Marygate.

RESIGNATIONS.

20 Members.
4 Lady Subscribers.
3 Associates.

DONATIONS TO MUSEUM AND LIBRARY.

LIBRARY.

BOOKS PRESENTED.

DONORS.

The Quarterly Journal of the Geological Society of London, Vol. lxix., 1913.	The Society.
Transactions of the Royal Society of Edinburgh, Vol. xxxii., Part 5. Vol. xxxiii., Part 1. Vol. xlvi., Parts 3-4. Vol. xlii., Part 1, and Proceedings Vol. xxxiii., Parts 2-3.	
Philosophical Transactions of the Royal Society, Series A., Vol. ccxii.; Series B., Vol. cciii.; Proceedings Series A., Vol. lxxxviii., Nos. A., 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612; Series B., Vol. lxxxvi., Nos. B., 585, 586, 587, 588, 589, 590, 591, 592, 593, 594.	The Rev. Prof. T. G. Bonney.
Catalogue of the Marine Reptiles of the Oxford Clay; Part 2, of the Mammals of Western Europe; of the Lepidoptera Phalænæ; of the Chaetopoda, in the British Museum; of Indian Big Game (Hume Bequest); the Morley revision of the Ichneumonidae; Part 2, of the British species of Pisidium, recent and fossil; of ungulate Mammals; Vol. 1, of Talbot's Nigerian Plants; Guide to the exhibition of specimens illustrating flight.	
	The Trustees of the British Museum.

Monograph of the United States Geological Survey, Vol. li., text and plates, Mineral resources; Part 1, Metals; Part 2, Non-metals, Bulletin Nos. 471, 501, 502, 503, 510, 513, 514, 515, 518, 519, 520, 521, 522, 523, 524, 525, 526; 527, 528, 529, 530, 532, 533, 534, 535, 537; Professional Papers, Nos. 71, 77, 78, 79, 80, 85a; Water Supply Papers, Nos. 259, 281, 283, 284, 289, 290, 291, 292, 293, 294, 296, 297, 298, 299, 300, 301, 304, 305, 307, 308, 310, 311, 313, 314, 315, 316, 317, 318; Geological Map of North America, and 33rd Annual Report of the Director to the Secretary of the Interior, and Annual Report of the National Museum for 1912.

Bulletins Nos. 51, 53, of the Bureau of American Ethnology, and 28th Annual Report for 1906-7.

Memoirs of the Geological Survey of India, Vol. xxxix., Part 2; Vol. xl., Part 1, and Vol. xli., Records Vol. xlili., Parts 1, 2.

Transactions of the Zoological Society of London, Vol. xx., Parts, 3, 4. Proceedings Parts 1, 2, 3, 4, 1913, and List of Fellows.

Bulletin of the American Geographical Society, Vol. xlv., Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.

Transactions of the Linnean Society of London, 2nd Series, Zoology, Vol. xi., Parts 11, 12; Vol. xv., Parts 3, 4. Botany, Vol. vii., Parts 19, 20; Vol. viii., Parts 1, 2, and Journal, Vol. xli., Part 282.

The United States Survey.

The Institution.

The Survey.

The Society.

The Society.

Tempest Anderson, D. Sc.

Report of the British Association for
the Advancement of Science, Dundee, 1912. } The Association.

Memoirs and Proceedings of the Manchester Literary and Philosophical Society, Vol. lvii., Parts 1, 2. } The Society.

Proceedings of the Geologists' Association, Vol. xxiv., Parts 1, 2, 3, 4, 5. } The Association.

Proceedings of the Royal Institution of Great Britain, Vol. xx., Part 1, No. 105. } The Institution.

The Journal of the Manchester Geological Society, Vol. xxvii., Parts 3, 4; Vol. xxviii., Parts 1, 2, 3, 4. } The Society.

Transactions of the Leicester Literary and Philosophical Society, Vol. xvii., 1913. } The Society.

North Yorkshire, by J. G. Baker, 1st Edition. } Dr. J. G. Gayner.

Memoirs of the Russian Geological Society, No. 62 (text and plates) 72, (Parts 2, 3) 79 (Part 5) 86. Bulletin Nos. 3, 4, 5, 6, 7, 8. } The Society.

Memoirs of the Russian Naturalists' Society, Parts 1, 2, 3. } The Society.

Proceedings of the Russian Mineralogical Society for 1912. } The Society.

An Account of the Crustacea of Norway, Vol. vi., Parts 1, 2, by Prof. G. O. Sars. } The Author.

Alpine Plants of Europe, by H. S. Thompson. } T. Gray.

Memoirs of the Royal Academy of
Science and Letters of Denmark,
Vol. ix., Part 2; Vol. x., Parts 2, 3,
4; Vol. xi., Part 1, *Det Kongelige
Norske Videnskabers Selskabs Shrif-
ter*, 1911, 1912, Nos. 4, 5. 6. *Forteg-
nelee Selskabs Shrifter*, 1760—1910,
*Oversigt det Kongelige Selskabs
Forhandlinger*, No. 2, 1913. } The Society.

Annual Report of the Smithsonian In- } The Institution.
stitution for 1911.

23rd Report of the Missouri Botanic } The Committee.
Garden for 1912.

Bergen Museums Aarbog and Aarsber- } The Institution.
etning, 1912, and Parts 1, 2, 1913.

Bericht der Oberhessischen Gesellschaft } The Society.
für Natur-und Heilkunde zu Giessen,
Parts 5, 7, 8.

Mitteilungen der Gesellschaft für Erd- } The Society.
kunde zu Leipzig, 1913.

Verhandlungen der Naturforschenden } The Society.
Gesellschaft in Basel Band, xxiii.,
Part 4.

Annalen des K. K. Naturhistorischen } The Society.
Hofmuseums, Vol. xxvi., 1912.

Boletin of the Geological Institution of } The Institution.
Mexico, Nos. 29, 30.

Bulletin of the Illinois State Geological } The Survey.
Survey, No. 17, 18, 19.

Natural History Transactions of North- } The Society.
umberland, Durham, and Newcastle-
upon-Tyne, Vol. xv., Parts 2.

The Journal of the Natural History } The Society.
Society of Glasgow, Vol. v., Nos. 1,
2, 3, 4.

Proceedings of the Nova Scotia Institute } The Institute.
of Science, Vol. xii., Part 4.

Annals of the New York Academy of Sciences, Vol. xxii., 1913. } The Academy.

The University of Toronto Studies, 1913, 16 Parts. } The University.

The Journal of the Northants Natural History Society and Field Club, Vol. xvi., Nos. 129, 130, 131, 132. } The Society.

Contributions to Canadian Biology. Prof. E. E. Prince.

Transactions and Proceedings of the Perthshire Society of Natural Science, Vol. v., Part 4. } The Society.

Annual Report and Transactions of the Nottingham Naturalists' Society for 1911-12. } The Society.

Annual Reports of the Moss Exchange Club for 1911-12-13, and Census Catalogue of British Hepatics, by W. Ingham, B.A. } The Author.

Pamphlets on Scandinavian Antiquities, by Prof. Haakon Schetelig. } The Author.

Guide to the Municipal Museum, Hull; Guide to the Wilberforce Museum; Catalogue to Museum of Fisheries and Shipping, and Hull Museum, Publications Nos. 93, 94, by T. Shepard, F.G.S. } The Author.

Biography and unparalleled discoveries of T. J. J. Lee, by W. L. Webb. } The Author.

Annual Report of the Department of Mines, New South Wales, for 1912. } The Department.

Report of the Colchester Museum of Local Antiquities. } The Museum.

Proceedings of the Rochester Academy of Science, Vol. v. } The Academy.

Manchester Museum Publication, No. 74 The Museum.

8th Annual Report and daily readings
at Meteorological Stations of the 2nd
Order and Weekly Weather Reports }
for 1913. } The Meteorological
Society.

Calendar of the University of Leeds, }
1913-14. } The College.

Calendar of the Armstrong College, }
Newcastle, 1913-14. } The College.

Annual Report of the Medical Officer of
Health for the City of York. } The Medical Officer.

ZOOLOGY AND COMPARATIVE ANATOMY.

A Pair of Live Cross Bills. W. H. St. Quintin.

BOTANY.

Specimens of "two-tailed Mouse," *Mar-
tynia proboscidalis*, from Uruquay. } H. B. Booth.

GEOLOGY.

A Small Collection of Jurassic fossils. F. C. Nunneley.

ANTIQUITIES.

A Supposed Roman Anvil, found on the } Geoffrey Jalland.
Mount, York. }

One Hundred Ashlar Stones. } The Very Rev. The
Dean.

Two Carved Norman Stones found in } C. Martin.
Piccadilly. }

Six Carved Stones from the site of the } The Manager,
Carmelite Priory, Hungate. } Electric Theatre.

One Inscribed 15th Century Grave Slab,	Rev. E. S. Bulmer.
One Early English Cross Slab, Two	
Early English Capitals, and One	
Carved Stone from St. William's	
Chapel, Ouse Bridge.	S. Walker.
Early English Mullion from West Win-	
dow, Holy Trinity Priory, also Nor-	A. B. Norwood.
man diaper Arch Stone.	
Norman Stones and Ashlar.	The City Surveyor.
One Stone from Holy Trinity Priory.	
Several Carved Stones.	Miss Wilson, Bootham.
An Old Tile with bone fixing.	
Two Wrought Iron 18th Century	J. Biscomb.
Brackets.	
An Afghan Dagger and Sheath.	Col. Ditmas.
An Old Oak Coffin.	J. H. Jolly.
Old Leather Pistol Holster and Iron	Oxley Grabham, M.A.
lining to Cromwellian Helmet	
Old London Drinking Glasses.	F. Buckley.
Norman Capitol and a Carved Stone.	A. L. Schwabe.

MISCELLANEOUS.

A Framed Photograph of the 'Late	Miss D. Walker.
Dr. Tempest Anderson.	



IN MEMORIAM.

TEMPEST ANDERSON, M.D., D.Sc., PRESIDENT OF THE
YORKSHIRE PHILOSOPHICAL SOCIETY.

BY the death of Dr. Tempest Anderson on August 26th last, the Yorkshire Philosophical Society has suffered an irreparable loss. He was not only its President, its most constant friend, and most enthusiastic supporter; he was a generous donor during his life, and the munificence of his last bequests to it will serve to keep his name in grateful remembrance as long as the Society exists.

Tempest Anderson had for many years devoted much time and attention to geological pursuits, especially to the study of volcanoes and seismic phenomena. His practical knowledge of this department of science was probably unsurpassed. He left home in January last to pay a long-purposed visit to the volcanoes of Java and the Philippines. On his voyage back an attack of heat apoplexy seized him in the Red Sea and quickly proved fatal. He was buried at Suez.

He had on various occasions previously had narrow escapes of losing his life when engaged in scientific travel. During a visit to Mexico for the Geological Congress in 1906, ptomaine poisoning caused him a severe illness; and when, in company with Dr. Flett, on a mission from the Royal Society to Mount Pelée and the Soufrière, he only just escaped destruction from a sudden eruption of the former mountain. It is a pathetic ending to his busy life that, when at last time and opportunity were granted him to visit Java and the Philippines, and after he had secured a large number of those artistic and instructive photographs which have made his name so well known to all who are interested in geography and geology, and which it was his delight to exhibit to this Society, he should have been carried off by death when more than half-way on his voyage home.

Tempest Anderson, the son of a well-known York doctor, William C. Anderson, who belonged to an old Yorkshire family, was born at Stonegate, York, in 1846. He was educated at the ancient school of St. Peter's, York, in which he ever took a

kindly interest, and where he was always enthusiastically received by the boys, and at the University of London. He was a student at University College, where he greatly distinguished himself, and of which he was elected a Fellow. He took the London M.D. degree in 1873, and in 1904 the University of Leeds conferred upon him the honorary degree of Doctor of Science. Dr. Anderson took a special interest in all that concerned the eye, and soon acquired in the North of England a great reputation as an oculist. He published various articles on this branch of surgery in the medical periodicals.

Dr. Anderson was for many years a member of the British Association for the Advancement of Science. He was Local Secretary at the Jubilee Meeting which was held at York in 1881; and when the Association again visited York in 1906 for its 75th Anniversary he was elected a Vice-President, and had the distinguished honour of lecturing on Volcanoes at one of the two great evening meetings in the hall of the Exhibition.

But it was as an explorer and photographer of volcanoes that he gained a reputation which may, without exaggeration, be described as international. In the preface to his 'Volcanic Studies'* he says: "For the last eighteen years I have spent the greater part of my holidays in exploring volcanic regions, including Vesuvius (twice), Etna, the Lipari Islands, Auvergne (several times) the Eifel (repeatedly), the Canary Islands, Iceland (two long visits), and various British extinct volcanoes now and again; in 1900, the district of the Grand Cañon of the Colorado in the Arizona Desert, which contains many extinct volcanoes; the Snake River and Columbia Basalts; the Crater Lake in the Cascade Mountains in Oregon, and the Yellowstone Park."

He visited the Soufrière and Mont Pelée as the accredited representative of the Royal Society in conjunction with Dr. Flett, in 1902, returning to them in 1907 and examining the volcanoes of Guatemala and Mexico; Matavanu in Savaii, Hawaii, New Zealand; and in the journey from which, alas, he never returned home, the volcanoes of Java, Krakatau, and the Philippines. He had also visited South Africa with the British

Association, when he took, amongst other pictures, some fine photographs of the Zambezi Falls.

In addition to the reports on Mont Pelée and the Soufrière contributed to the Royal Society, articles in the Geological and Geographical Journals, Tempest Anderson read papers on the Arizona Desert, two ascents of the Soufrière, and an ascent of Matavanu, before the Alpine Club ; he also contributed quite a number of articles on volcanic subjects to the Alpine Journal, all of them illustrated by his own excellent photographs.

He was elected a member of the Alpine Club in 1893. He knew the Western Alps thoroughly, and was well-known at the frequented Alpine centres from the Eggishorn to the Montanvert, and from the Gemmi to the Victor Emmanuel Refuge on the Grand Phradis. His photographs had a great reputation at the annual Photographic Exhibitions of the Club. His photograph of “The Ridge of the Petit Flambeau” near the Col du Géant, was chosen as one of the three best examples of mountain photographic art at the Exhibition in May, 1913. Many good judges pronounced it to be in their experience unsurpassed. Dr. Anderson was an excellent walker and a genial companion ever ready with a humorous resignation to make the best of the multifarious troubles of travel.

He was for many years the moving spirit in the Yorkshire Philosophical Society, and both as Secretary and President laboured hard for its success. He presented it with a very fine Lecture Theatre, now known as the Tempest Anderson Hall, which was opened by Dr. T. G. Bonney, in June, 1912, on which occasion he was presented with his portrait, painted by Mr. William Orpen, A.R.A., as a mark of the Society's grateful appreciation of the invaluable work which he had done for it.

To those who lectured before the Society he extended a gracious hospitality in the wonderful old house in which he lived in Stonegate, one of the most famous of York's historic streets of timbered architecture and narrow roadway. Here, under the shadow of the Minster, his family have resided for very many years. The garden was a revelation to his guests, for the lawn reminded one of the turf in an old college quadrangle, and a fig tree flourished under his study window. Lord

Plunket, Sir Alfred Pease, the late Sir William White, Sir Everard Im. Thurn, Colonel Hellard, the late C. E. Matthews, Dr. T. G. Bonney, F.R.S., late President of the British Association, Mr. Douglas Freshfield, now President of the Royal Geographical Society, the Bishop of Bristol, Dr. G. Forrest Browne, the last four all ex-Presidents of the Alpine Club, have been his guests, some of them more than once. He was a perfect host.

He had served on the Councils of the Royal Geographical, the Geological, and Linnean Societies, had been Tyndall Lecturer on volcanoes at the Royal Institution, and, as previously mentioned, a Vice-President of the British Association, at whose meetings he was a regular attendant.

Tempest Anderson was, with reason, very popular in his native city of York, where he did much excellent work both professionally at the York Hospital (where, as mentioned before, he had a very wide reputation as an oculist) and informally in many ways. He was a magistrate and filled the office of Sheriff in 1894. Scientific and Archæological Societies of all sorts found in him a hearty supporter. Town-planning was one of his many interests. The experience acquired during his travels (he was a very observant man) bore fruit in all sorts of ways. For instance, the York Waterworks, of which he was a Director, benefited largely by his visits to American water undertakings, and have become famous for their up-to-date arrangements.

Tempest Anderson had a singularly lovable nature. He had a gift for forming and retaining friendships. Honest as the day himself, he accepted the good faith of those who differed from him, and never used hard words of them. Never extravagant in his expenditure on himself, he gave a liberal support to a large number of societies and institutions, whilst in private his charities were generous and manifold, and only very partially known even to his intimate friends.

He will be deeply regretted by a large circle of friends in the Yorkshire Philosophical Society, in his native county and country, and in all of the many volcanic lands to which his zeal for investigation carried him.

COINS:

ESPECIALLY THOSE RELATING
TO YORK.

BY

GEORGE BENSON.

Hon. Curator of Archaeology.

SUMMARY.

INTRODUCTION—GREEK COINS.

I.—THE COINAGE OF THE BRIGANTES.

II.—ROMAN COINAGE.

The Roman Coins found in York belong almost entirely to the Imperial Series. The Emperors Severus and Constantius died at York. Constantine (the Great) was saluted Emperor at York. Coins of St. Helen. 6,000 Coins of Constantine and his family, found in an urn at Langwith, near York, in 1891. Christ depicted on 10th Century Coins.

III.—THE YORK ROYAL MINT.

i.—Historical. The Anglian Kingdom of Northumbria. The Viking Kingdom of York. The Anglo-Danish Mint. William I. to Edward I. Edward I. to George III. The York Mint ceased in 1553, but was re-opened by Charles I. and William III.

ii.—The Coins.

IV.—THE YORK ARCHIEPISCOPAL MINT.

i.—Historical. The Mint ceased in 1544.
ii.—The Coins.

V.—YORK TRADESMEN'S HALFPENNIES AND FARTHINGS. YORK TOKENS AND MEDALS.

i.—Historical.
ii.—The Coins and Tokens.

VI.—ABBEY OR NUEREMBERG TOKENS AND COUNTERS, many of which were found in York.

i.—Historical.
ii.—Tokens, Counters, and Jettons.
iii.—British Tokens and Medals. Election Tokens.
iv.—Coins of British Possessions.
v.—Foreign Coins.

VII.—THE YORKSHIRE PHILOSOPHICAL SOCIETY'S COLLECTION.

i.—Historical.
ii.—Coins.
iii.—Bibliography.

ILLUSTRATIONS.

Plate.

- I.—GREEK COINS. ROMAN VASE WITH COINS FROM LANGWITH, 1891.
- II.—BRIGANTIAN, ETC.
- III.—ROMAN, GOLD, SILVER, AND BRONZE COINS.
- IV.—COINS OF ST. HELEN. CONSTANTINE THE GREAT. COINS WITH CHRISTIAN EMBLEMS.
- V.—CHRIST DEPICTED ON COINS. NORTHUMBRIAN SCEATTAS AND STYCAS. THE VIKING COINAGE OF YORK.
- VI.—COINS, ANGLO-DANISH TO CHARLES I.
- VII.—COINS OF WILLIAM III. YORK TRADESMEN'S HALFPENNIES. YORK TOKENS. NUEREMBERG TOKENS.
- VIII.—COINS OF THE YORK ARCHIEPISCOPAL MINT.

COINS:

ESPECIALLY THOSE RELATING TO YORK.

By GEORGE BENSON.

Hon. Curator of Archaeology.

(The numbers in brackets refer to the coins shown on the Plates.)

INTRODUCTION.—GREEK COINS.

“THE Egyptians, Chaldeans and Assyrians attained great skill in metallurgy; they had written characters; they had an extensive commerce, but in the time of their independence they never had a coinage. Even the Phœnicians had it not till a late period—certainly not till after their subjugation by Persia.”

Coinage was in use in Lydia in Asia Minor as early as seven hundred years before Christ. The earliest were made of electrum with an “incuse” or sunk panel on the reverse. Some of the city-states in Europe that comprised Greece sent out colonies across the Ægean sea. These settlers occupied the seaboard of Asia Minor, and adopted from their neighbours, the Lydians, the use of coins, but introduced engraved dies and the use of silver. The tortoise is depicted on these coins. The use of coins spread to the other Greek states. On the Attic coinage the owl is represented.

Gold coins were introduced by the wealthy Cræsus, King of Lydia, who brought under his rule the neighbouring Greek cities. In 546 B.C. he was attacked and defeated by the Persians. The gold coins (“darics”) of King Darius circulated in Greece. The Greek state of the Ionians revolted. The Persians attacked the European Greek states, but suffered defeat. In 338 B.C. Philip II. of Macedon became master of Greece. He issued a gold stater showing the head of Apollo and a two-horsed chariot. These coins became popular. The design was copied by other races in Gaul

and elsewhere, first from the original, then from copies, and afterwards imitated from memory as in some British coins, which bear scarcely any resemblance to the original design, which however can be traced in a series of the coins. In 168 B.C. the Greek King, Perseus, was defeated, and Greece came under the dominion of Rome.

There are a few Greek coins in the Museum. They bear representations of their gods, the obverse being occupied with a head and the reverse with a subject. Amongst the reverses are depicted: a female driving a quadriga whilst Nike (Victory) is flying towards her with a wreath (1); Apollo seated with two arrows in one hand and a bow in the other, Dionysos (Bacchus) standing naked and holding a bunch of grapes. On a coin of Lysimachus, King of Thrace, Athena (Minerva, is represented resting on a shield; and on one of Alexander the Great, Zeus (Jupiter) is seated (2). There is a copper coin of Ptolomy Sotor, King of Egypt, who was the first monarch to exhibit his own head on a coin. A silver Attic tetradrachm (3), weighing 260 grains, depicts the head of Athena wearing a helmet adorned with Pegasus—the flying horse,—and on the reverse an owl standing on an amphora, and the names Dioclis and Medeius. Another ‘owl’ reverse is on an early 5th century B.C. tetradrachm (4). A small silver coin of Histiaeia has on the reverse a female sitting on the prow of a vessel. It was found amongst the money paid for admission to the agricultural show when held in the barrack yard.

Coins were introduced into Britain from Gaul. Their superiority as a medium and measure of exchange over the system of barter was gradually recognised, and their use spread northwards.

I. THE BRIGANTIAN COINAGE.

The Brigantes, who occupied the land from the Humber to the Forth, had a gold and silver coinage. The coins are slightly curved and have on the convex side ornament bearing some slight resemblance to a laureated head, and on the concave side a curious representation of a horse. The earliest coins are uninscribed. Subsequently letters appear on the coins; those on the later issues show that the Brigantes had come under the influence

of Roman civilization. York appears to have been the Brigantian capital, and it is probable that the coins were minted there.

Five gold coins¹ in the Museum were found, with Roman consular coins, in 1829, at Almondbury, near Huddersfield. Two (6-7) of them bear on the convex side, between three lines, the letters VOLIO, and on the concave side DVMNOCOVEROS, interpreted by Professor Rhys² as ‘‘Volusius, who styles himself Dumnocoveros, probably meaning the guardian of the state, or the man of the people.’’ In 1893 five similar coins, now in the British Museum, were found at Honley, also near Huddersfield. Four bear the letters VOLSI and on the concave side DVMNOE, and one had on it CARTI,³ apparently for Cartimandua, the notorious Queen of the Brigantes. The other three coins (8-9-10) of the ‘‘Almondbury’’ find have, on the convex side, a peculiarly formed wreath with a large beaded ring at each end, and on the other side an intertwined figure which may represent a horse, and the letters VEP. COR. F. which, Professor Rhys remarks, are possibly to be treated as Latin, meaning ‘‘Vepogenos, son of Correos or the like.’’ These coins appear to belong to the end of the Brigantian era, just before the conquest of the Brigantes by the Romans in the year 71.

There are in the Museum, in addition to the find from Almondbury, four other gold coins (11-12-13-14), one from Halifax and three purchased. The latter belong to midland or southern tribes. There are also four small silver coins (15-16-17-18), depicting animals; one in addition shows a human head.

No Brigantian coins are recorded as being found at York, but other finds are: in 1827, four at Lightcliffe, two near Pickering, one at Atwick, and one, in 1904, at Hornsea. In 1906 a hoard⁴ of uninscribed coins, numbering 75 gold and 63 silver, was found in boulder clay which was exposed by the sea at South Ferriby, in Lincolnshire. Mr. Roth considers the coins were in mint condition when placed in a receptacle and buried during the struggle between the Brigantes and the Romans.

¹ There were 8, three—probably duplicates—have been parted with in exchange.

² ‘‘Celtic Britain,’’ p. 40.

³ N.C. 1867.

⁴ B. Roth, N.C. 1908-9.

II. ROMAN COINAGE.

In 1867, by the exchange of duplicates, specimens of the Roman As in its original and reduced size, as of its fractional parts, were placed in the York Museum cabinet.

The first silver coinage of Rome took place in 268 B.C. The denarius continued as another name for the English silver penny and 'd,' its initial, is still used for penny. The oldest Roman silver coins bear the double head of Janus and the quadriga, the head of Roma and the Dioscuri on horseback and above them the stars. On another reverse is shown Victory in a biga. Subsequently, other heads occur on the obverse, while the reverse is occupied by a device allusive to legendary or historical events connected with the family of the mint maker. Of the three names which every Roman of family bore, as Publius Cornelius Scipio, the second is the surname and the third that of the family. Amongst these coins in the Museum, one of M. Porcius Læca alludes to the celebrated Porcian law, by which it was forbidden to scourge with rods a Roman citizen. The tribune, who proposed the law, lived in the year 197 B.C., but the coin is not older than the time of Cicero and the Catalinarian conspiracy in which a Læca was concerned. A denarius of C. Valerius Flaccus bears the winged head of Victory, and on the other side the three ranks of Roman infantry are represented. On the reverse of a coin of Titus Veterius is shown the sacrifice of a pig in declaring Peace. A coin of Caius Lentulus Cornelius has on it the head of the youthful Hercules with lion's skin and club and shield, while on the reverse Victory is offering a wreath to a figure wearing a mural crown. The suppression of a revolt of the slaves in Sicily is commemorated on a coin of Manius Aquillus. It is rare to find the names of minters on brass coins, but one in the Museum bears A.P., probably for a member of the Appuleian family. The only coins in this series found in York belong to the family of Antonia, of whom Akerman mentions there are 138 varieties. The five recorded depict on one side the Roman Eagle between two military standards, and on the other side a galley.

The Roman coins which circulated in our district belong almost entirely to the Imperial Series, and range from Augustus to Honorius.

The Imperial Series began with Augustus who assumed the right of coinage of gold and silver but left to the Senate the issuing of bronze coins. The moneyers' names do not appear on the Imperial

money. In the inscriptions titles are much abbreviated, as IMP for Imperator, which, when it precedes a name, implies supreme power, but following a name is only a military title. From the time of Constantine D.N. (Dominus Noster) is used at the beginning of the inscription in place of IMP. CAES stands for Cæsar, AVG for Augustus, P.M. for Pontifex Maximus, P.P. for Pater Patriæ, TR.POT or TR.P. for Tribunicia Potestas, meaning Tribunician Power and COS for Consul. The numerals after each denote the number of years the office has been held, enabling the date of the coin to be ascertained. On reverses, the letters S.C. stand for Senatus Consulto (by the authority of the Senate) and S.P.Q.R. for Senatus Populusque Romanus. In the base are letters indicating where the coin was minted as S.M.R. (Signata Moneta Roma) for Rome, P.TR for Treves, CON for Constantinople. Other letters following as A and B are considered to signify respectively the 1st and 2nd mintage.

Camden mentions a coin of Severus bearing on the reverse "COL. EBORACVM LEGIO VI VICTRIX." That there is such a coin is doubtful, and its existence is now unknown. Drake considers that the coins of Severus bearing the title Britannicus were minted at York. "It cannot be imagined but that the mint attended the imperial court; for no sooner was a great action performed but the whole empire was made acquainted with it, by some signal reverse stamped immediately upon the current coin."¹ So far, no Roman coins have been found that can, with certainty, be attributed to York. Coins bearing PLON for London exist; these belong to the family of Constantine the Great. Carausius and Allectus had coins struck at Colchester (C) as well as at London (ML).

The obverses are filled with a portrait of the Emperor, the first portrait on a Roman coin being that of Julius Cæsar. The reverses contain an allegorical or military subject surrounded by the legend. The great variety of subjects and legends on the reverses make the study of Roman coins very instructive.

Gold coins have been presented to the Museum, as follows:—
1833—Gratianus, Valens, and Valentianus, by W. C. Maxwell;
1834—Honorius, found at Kirby Knowle, by C. Elsley; 1838—Arcadius, found at New Buildings, Thirsk, by C. Elsley; 1840—Carinus, by C. Wellbeloved; 1873—Constantius II. (21), found in

¹ Drake, "Eboracum," p. 61.

Walmgate; 1883—Valentinianus, Valens, and Leo (22), by Mr. Barstow. The others in the collection are of Vespasian (19), found on the site of the Exhibition; Antoninus Pius and Marcus Aurelius (20). The latter was found in Trinity Lane in 1912, and was purchased.

Few gold coins have been found at York, but at Corbridge, near the Roman wall, above 200 were found within the last five years. In addition to the two coins above mentioned, the following have been recorded for York:—1731 Crispus,¹ found in Bootham; 1739 Constantius II.² in Briggate (Bridge Street), and 1840 Nero, found in the railway excavations.

At Binnington Carr, E.R. Yorks., there was found a bronze bell containing 12 silver coins. One is a Consular coin, the others are of Nero, Vitellius, Vespasian, and Titus.

A hoard of silver coins was found in an earthen vessel at York. 224 coins³ were purchased in 1846 by the Yorkshire Philosophical Society from Mr. Hargrove. They range from Titus to Philippus (d. 249). 28 coins³ from Titus to Valentinianus were also found in York and purchased from Mr. Hargrove, along with other 30 from York but which were illegible. The “Hargrove” Collection now numbers 315 coins. Among them are coins of Severus (23), his wife Julia Domna (24), and their sons Caracalla (25) and Geta (26). As Severus and his family resided in York for a time, a few remarks on them may be in place.

After the death of Pertinax, the legions under the command of Severus proclaimed him Emperor. He thereupon marched to Rome where, in 193, his title was confirmed by the Senate. Severus then took the name of Pertinax, and four years later was sole master of the empire. He invested his son, Caracalla, in 198, with the title of Augustus and with the Tribunician power. In the Museum is a denarius⁴ of Severus and Caracalla, struck in 202, bearing a laureated bust of Severus on one side and a laureated bust of young Caracalla on the other side. This coin is of considerable rarity. In 209 Severus invested his other son, Geta, with the title of Augustus and with the Tribunician power. The three Emperors came to Britain to quell a rebellion of the Caledonians. Geta acted as governor of the Roman province whilst Severus and Caracalla advanced against the enemy and

¹ Drake.

² Hargrove, Vol. 1 p. 301.

³ Y.M. MS. Catalogue.

⁴ Purchased, 1911.

defeated them. Coins were struck to commemorate the victories in Britain. Of Severus's gold and silver rare reverses Akerman gives 171 which include the Emperor on horseback, the three Emperors (Severus and his sons) on horseback, full faced head of Julia Domna between those of Caracalla and Geta, heads of Caracalla and Geta face to face, one laureated. On others are depicted Victory, Equity, Hope, Ceres, Bacchus, Hercules, Mars, Fortune, Cybele on a lion, Jupiter, Venus, the winged head of Medusa, and the head of Jupiter Ammon.

Julia Domna was married to Severus in 173 and died in 217. Akerman gives 65 rare reverses on her coins as Diana, and Juno with Peacock, and Concord. The obverse has the head of the Empress and around it Julia Augusta. (24).

Bassianus, nicknamed Caracalla from his Gaulish dress, agreed, on the death of his father, to share the empire with his brother Geta, whom he murdered the following year. When Caracalla was created Cæsar by his father in 196 he took the names of Marcus Aurelius Antoninus, and as these appear on his coins they are sometimes confused with those of the philosopher, Emperor Marcus Aurelius. The words "Antoninus Pius" on Caracalla's coins also appear on the coins of the Emperors Antoninus Pius, and Elagabalus. On one of Caracalla's, found at York, he is styled Britannicus, and on the reverse is a figure of Serapis standing.

Lucius, or Publius Septimius Geta, was born in Milan about 189. On a coin (26) of his found in York he is also styled Brit(annicus), and on the reverse is a figure of Victory and the words Victoriæ Brit(annicæ).

A hoard of nearly 200 silver coins was found in Railway Street in March 1898, 15 of them are in the Museum, they comprise coins of Trajan, Commodus, Faustina, etc.

The Roman bronze coinage consists of large, middle, and small brass. Coins of Trajan (27) and Hadrian (28) will serve as examples of the large brass series. The reverse on the former bears the well known S.P.Q.R., whilst on that of the latter Fortune is shown. It was during the reign of Trajan that the camp at York was surrounded by a stone wall, while Hadrian was the builder of the Great Wall from the Tyne to the Solway.

A hoard of coins, found in January, 1856, at Methall, near Warter, was presented by Lord Londesborough to York Museum. The coins were sorted as follows: Valerianus 2, Gallienus 202,

Salonina 11, Postumus 11, Victorinus 282, Marius 3, Tetricus Pater 1087, Tetricus Filius 233, uncertain Tetrici 87, Claudius Gothicus 160, Quintillus 9, Aurelian 3, illegible 452, making a total of 2542. Of these, Lord Londesborough presented 1538, 262 of which were sent to Leeds Museum. W. Rudston Reed also presented 53 to York Museum.

The Rev. J. Kendrick, in a paper on Lord Londesborough's gift, stated "there are about 1500 almost entirely of the third brass, and these exhibit a very debased state of the coinage, natural in a period of confusion, foreign war and internal insurrection. Great abuses appear to have prevailed in the Roman mint, and when Aurelian endeavoured to reform them, the consequence was an insurrection of the moneyers, to put down which cost the Emperor 7,000 of his soldiers.

" The period of these coins is from 253 to 273 or a little later; a period which possesses a sort of epic unity, since the reign of Valerian, with which it begins, exhibits the deepest degradation of the majesty of the Roman empire, and that of Aurelian, who was elected in 270, witnessed the restoration of the unity (temporarily destroyed by the Thirty Tyrants), the subjugation of the barbarians, and the fortification of Rome.

" The coins of Victorinus and Tetricus are very abundant in Britain, and particularly in York and Aldborough and their vicinity. It is evident that Britain was subject to the rulers of Gaul during this period. It is remarkable that among the coins found at Warter, there are 9 of Quintillus, the brother of Claudius Gothicus, who reigned only seventeen days, and 3 of Marius, who is said to have reigned only three days. No time seems to have been lost by the new emperors in assuming the prerogatives and titles of sovereignty.

" The coins of this period attest the increase of the solar worship, caused by the growing influence of Asiatic, and especially Syrian, rites and usages at Rome. It is seen in the legend, Oriens Augusta, with the figure of the sun, and in the radiated crown which all the Emperors wear. The crescent moon, placed beneath the head of Salonina and other Empresses, is also a proof of astral worship.

" The period in which these coins were struck was one of great calamity, exciting the superstitious fears of the people. An extraordinary number exhibit figures of the gods, with the legends, Jupiter Conservator, Propugnator and Ultor, Neptunus Conservator, Apollo Conservator, Diana Conservatrix, Liber Pater Conservator,

Mars Pacifer, and Sol Conservator Augusti. Segetia, a goddess who presided over the harvest, and was one of the Dii Indigetes, or native gods of Italy, appears on a coin of Salonina, probably struck in apprehension of famine, or in gratitude for deliverance from it. The coins of Postumus are remarkable for the honour paid to Hercules; those of Claudius Gothicus for the variety of types representing the consecratio or apotheosis of this Emperor, who was cut off by a pestilential disease after a reign of two years, and was deeply regretted by the senate and people."

Akerman gives 222 varied reverses on the third brass of Carausius, and 47 on the silver coins. The Museum possesses a 'second brass' with a figure of Peace on the reverse, and 'third brass' coins with reverses showing a boar, Mars, Peace, Faith with military ensigns, a winged Victory; Moneta with scales, struck on a coin of Victorinus, whilst another coin with Peace bears the bust and name of Diocletian. Akerman also gives 69 varied reverses on the third brass of Allectus and 24 on the gold coins of Constantius.

A coin with bust of Allectus has on the reverse PAX AVG and a figure of Peace between S.P, and ML in the exergue, also with part of a former inscription "IMP CARAVS" along the edge, showing that the reverse had been struck on a 'Carausius' obverse. The coin was found in Railway Street, and on April 18th, 1850, was exhibited at meetings of the Society of Antiquaries and the Numismatic Society, where it was examined by J. T. Akerman and Ed. Hawkins. The coin is in the possession of Mr. R. B. Cook.

The Emperor Constantius dwelt for a time in York, therefore a few notes relating to him and his family may be of interest. Flavius Valerius Constantius was surnamed Chlorus, on account of the paleness of his complexion. He married Flavia Julia Helena, but in 292, on being created Cæsar, he repudiated her and married Theodora. In 305, at Milan, he was proclaimed Augustus. He came to Britain to quell a rising beyond the Wall. Peace being secured, he came to York where he was taken ill and died. The army at York proclaimed his son Constantine, Cæsar and Augustus. Constantine soon after left York, and in 311 embraced the Christian religion. He became sole master of the Empire in 323. Two years later Constantine invested his mother —Helena—with the title of Augusta (29). Helena, who was the reputed discoverer of the Cross, died at Rome in 328. In 330, Constantine quitted Rome for Byzantium, which city he made his capital and re-named it Constantinople, and issued a large

number of small brass commemorative coins. In 337 he also issued smaller coins commemorative of his mother Helena (34) and of Theodora, the first and second wives (who were both dead) of his father, Constantius. Constantine the Great died that same year.

In 1891, more than 6,000 small brass coins of Constantine I. and his family were found in an urn (5) at Langwith. Amongst them being coins of St. Helen, (31-32-33) minted at Constantinople and Treves. The coins of Constantine (35) included) Urbs Roma (36) and Constantinopolis (37). The reverses of the Urbs Roma coins depict the legend of Romulus and Remus being suckled by a wolf. Amongst a hoard of 2,600 coins found at South Ferriby, there were 9 of Helena and 20 of Theodora.

In 1862 in Pavement, at the end of All Saints Church, there were found two coins of Constans, and a number relating to Constantius, probably Flavius Constantius, son of Constantine. The legend *FELIX TEMPORVM REPARATIO* which appears on them seems to have reference to the re-union and re-organisation of the empire effected by Constantine. It is often accompanied by the phoenix, a symbol of revival.¹

Although Christianity had been the established religion of the State, the pagan types on the coins continued. The monogram of Christ however occurs on medallions of Constantine and Constans, and on coins of Constantius II, Decentius, (38) and Flacilla, wife of Theodosius. This Empress died in 388. An effigy of Christ occurs on a gold medallion of Crispus.

On some coins of the Vandal Kings (10th cent.) the head of Christ is shown (39-41), and on a coin (40) of Johannes Zimisces (d. 975) Christ is depicted seated.

III. THE YORK ROYAL MINT.

(i.) *HISTORICAL.*

THE ANGLIAN KINGDOM OF NORTHUMBRIA.

By successive immigrations the Anglians became the dominant people in the land between the rivers Humber and Forth. Subsequently they founded the kingdom of Northumbria, and eventually issued a coinage. The famous Unic of Thoresby with bust and

¹ J. Kendrick.

EDPIN REX A and reverse + SIEJEL ON EOFER surrounding a central cross was read as a coin of Edwin, the great King of Northumbria, but Pegge in 1722 showed it to be a penny of Edward the Confessor. Four or five copper coins—two now in the British Museum—were found in Heworth chapel-yard, Durham, and have on them + EHGFRID REX (670-685) and on the reverse ^{LV} _{XX}. The title Rex does not appear on other Northumbrian coins until a century later. A Mercian coin bearing OFFA REX (in two lines) has on the reverse LVL similarly arrayed as on the Heworth coins. The LV on the latter coins may be an abbreviation of LVL or LVLLA, a moneyer of Offa, King of Mercia (757-796) and his successor Cœnwulf. It has been suggested that the Heworth coins are those of Offa's son Ecgfrid (796) who only reigned 141 days.¹ Two copper coins found at Bolton Percy bore inscriptions inverted + EHFRAIDE with reverse + EVDAINI (Eadvini). These blundered inscriptions have been attributed to King Ecgfrid of Northumbria, but Eadvini was a moneyer about a century later.

Two coins, one silver and one copper, have been assigned to Aldfrid (685-705). They bear + MLDERIDUS, whilst the reverse shows a curious quadruped. The attribution is not certain. There are no coins of the five successive Kings—Eadwulf (705, two months), Osred I. (705-716), Cœnred (716-718), Osric (718-729), and Ceolwulf. At the end of Ceolwulf's reign, namely, in 735, Ecgberht, Bishop of York, became Archbishop of York. Two years later King Ceolwulf, to whom Bede dedicated his history, abdicated and retired to the monastery. He was succeeded by Eadberht, brother to the Archbishop. Under the rule of the King and the Archbishop Northumbria prospered. The King reigned 21 years and the Archbishop held office for 8 more years. It may be that they introduced the Northumbrian coinage, each issuing coins, one as the secular head and the other as the spiritual head of Northumbria. The regal coins are of silver having the reverse occupied with a representation of a horned animal (stag ?) walking to left or right, or with forepaw raised or kicking with hind leg. The earlier Northumbrian coins were probably uninscribed.

Silver sceattas (42-43-44) bearing the name of the King and with animal reverse were issued until the time of Eardwulf, who

introduced copper stycas as the only coins. Stycas (46-47-48) are peculiar to Northumbria. They have usually a cross in the centre surrounded by an inscription beginning with a cross. The obverse contains the name of the King and the reverse that of the moneyer—the maker of the coin. The central devices consist of a cross which is varied in all kinds of ways, and often within a circle similarly varied. A coin (50) of Ethelred II. by the moneyer Leofdēn has an animal on the reverse. There are three of these coins in the Museum. At a recent sale £10 5s. was paid for a similar coin. A coin (49) in the Museum bears a bust and has a 'bird' reverse. The Kings employed a large number of moneyers, for example, Eanred had thirty-two and Ethelred II. thirty-four. Names are sometimes retrograde and are often blundered.

Four great finds of stycas were made during the last century, namely, in 1808, of 542 at Kirk Oswald¹ in Cumberland; in 1833, of 8,000 at Hexham; in 1842, of many thousands in St. Leonard's (Mint Yard) at York; and in 1846, when a large number was found at Bolton Percy (45).

THE VIKING KINGDOM OF YORK.

York was captured by the Vikings on Nov. 1st, 867. Under Halfdan, the Danish King of York, the issue of copper stycas ceased and silver halfpennies were introduced. His successor Guthred, known as Cnut, issued silver pennies (51) and half-pennies from York. These coins bear a cross having equal arms or a patriarchal cross inverted with C.N.V.T. respectively at the ends, and REX in the angles of the cross, whilst the reverse has upon it + EBRAICE CIVITAS or + EB IAI CEC IV for York, or the Carolus monogram introduced by Charlemagne (d. 814) and adopted by Charles the Bold in 864. Cnut was followed by Siefredus, on some of whose coins his name appears as SIEVERT (52). The Danish standard is represented on the coins of Regnald, Sitric and Anlaf. The Raven with wings displayed is depicted on a coin of Anlaf Quaran. In 921 Edward the Elder received the submission of Regnald and issued coins from York. Athelstan (53) succeeded his father, came to York, expelled the Viking ruler, and from York issued coins, some bearing inscriptions signifying that Athelstan was King of the

¹ Eanred 99, Ethelred II. 350, Redulf 14, Osbercht 15; Archbishops—Eanbald 1, Vigmund 58, Vulfhere 5. Total 542.

whole of Britain. Eric was placed on the throne of York by Athelstan. A sword is depicted on some of Eric's coins. The coins of Regnald II. have various devices as Regnald's head, the monogram of Charles the Bold, the open hand, the hammer of Thor, and the Bow and arrow. An example of the last was recently sold for £60 10s. Eadmund drove out Anlaf Quaræn and Regnald II. and issued from York coins on which the annulet appears. Eric was subsequently restored as King of York, but in 954 was conquered by Eadred of Wessex, who reduced Northumbria to an earldom. Archiepiscopal coins were struck at York during the Viking period.¹

In September, 1807, a leaden box containing about 270 silver coins and some fragments of silver ornaments weighing about 2lbs. was turned up by the plough near the inn called Lobster House, eight miles from York and in the parish of Bossall. Amongst the reverses were Eborace for York, the open hand, the Carolus monogram, and the bow and arrow. There were also coins of Alfred, Edward the Elder, and Athelstan.

In 1840, at Cuerdale, near Preston, in Lancashire, seven silver ingots, armlets, and fragments, weighing 974 oz. 10 dwts., and 7,000 silver pennies were found in a small earthen vessel. Amongst the coins were those of Cnut 2534, St. Edmund 1815, Alfred 919, Siefred 238, Ecclesiastical 205, Eadweard 51, Halfdan 2, Earl Sitric 2, Alvaldus 1.

THE ANGLO-DANISH MINT.

Eadred, King of England, and his successors Eadwig, Eadgar, Edward the Martyr, and Ethelred II. (54) had each a mint at York. The King's bust appears on the coins of Eadgar. On some of Ethelred II.'s coins a sceptre is shown in front of the bust; others have the King's bust in armour, with a radiate helmet. The reverses are varied: a hand, a cross voided with the letters CRVX respectively in the angles, a long cross voided each limb ending in three crescents, a long cross voided having a square centre with three pellets at each corner. This King had at York thirty-six moneyers.

The Danish Kings Cnut (Canute) and Harold I. continued the York mint. On coins of the former the crowned bust is within a quatrefoil, the long cross voided on the reverse is similarly treated.

¹ Section IV.

On others the King is shown wearing a pointed helmet and has his sceptre in front of him ; the reverse cross voided has in each angle an annulet enclosing a pellet (55). One type shows the bust dividing the surrounding inscription. The reverses of Harold's coins have either a cross formed of four ovals, or a cross voided and in each angle a fleur-de-lys between two pellets. Harthacnut's coins have on the reverse a cross voided, in the centre of which is a circle enclosing a pellet.

Edward the Confessor (56) issued eight types of coins from York, the finest of which are those showing on the obverse the King enthroned, and on the reverse the cross and martlets.

A hoard of coins of the Confessor was found on Bishophill, 174 of which are in the Yorkshire Philosophical Society's Collection, and were described by Mr. Charles Wakefield, hon. curator, in the Report for 1910.

Harold II., victor of Stamford Bridge, during his reign of a few months, issued from York a number of coins having "PAX" reverse in place of a cross.

WILLIAM I. 1066, TO EDWARD I. 1272.

The Conqueror struck silver pennies (57-58) upon the same principle as his Anglo-Saxon predecessors, retaining the same weight and fineness, and even imitating their types. His coins have been assorted into nine types,¹ the last have 'Pax' reverses copied from the coins of Cnut (Canute). The moneymen of Harold and Edward the Confessor were employed. The name of the King is given as "PILLEMVS," in which P is the symbol for the Anglo-Saxon W : "Willem" and "Willelm" also occur. The Domesday Survey records that Nigel de Monneville had one mansion in York of a certain moneymen.

Two large hoards of silver pennies of William I. have been found in York. In 1704 during excavations for the rebuilding of houses in High Ousegate, a workman found an oak box containing 250 coins of which about 100 were worth preservation. Thoresby examined 50 or 60 of them. Three had been struck at York. Of type I. one bore OVDBEORN ON EOFI, the others were of type II. and struck by the moneymen Outhbeorn and Thorr respectively. In 1845, in taking down houses at the corner of

¹ "The Coinage of William I. and II.," by Fred Spicer, N.C. 1904.

Coney Street and Jubbergate, there were discovered below the cellar floor more than 500 silver coins; 200 were examined by Hawkins, who stated that more than 50 were from the York mint. Ten coins of this find are in the Yorkshire Philosophical Society's Collection. The moneymen are: Aleif, Andolf 2, Arcetel, Oudbeorn 2, Oudgrim, Roscetel, Ulfketel, and Dorr.

In 1833, 12,000 silver pennies were found at Beaworth, in Hampshire. Eighty were from the York mint. The moneymen mentioned above in the York find of 1845 are represented, and in addition there were: Hardulf, Leisinc, Sweartcol, and Vpdblrbn.

The coins of William II. are not of such good workmanship as those of the Conqueror. His coins have been assorted into five types. He is shown with sword or sceptre, or with star on either side of his bust. Amongst the York moneymen are Alief, Lestic, Lifwine, and Godrep. There were 68 mints, including York and Durham, throughout England.

Henry I.'s coins are similar to those of William I. and II. They bear a crowned bust facing with annulet on either side, or with sceptre sometimes with a star. The coins struck at York are by Brihtroth, Ulf, etc.

Some silver pennies of Stephen depict him holding a standard, probably in allusion to the Battle of the Standard in 1138. Mr. Peake¹ suggests that these "flag coins" with unintelligible legends on the reverse were struck at York on Stephen's behalf by the King's nephew, William Fitzherbert (St. William). Coins with figures of Stephen and his wife Matilda were issued in 1141, and commemorate the King's liberation when the army of his Queen captured Robert of Gloucester. The Empress Matilda came to England in 1139, defeated Stephen, and was crowned at Oxford in 1141. The following year she was defeated and returned to Normandy. Her coins bear the title IMP.

During the wars with the Barons, Eustace, elder son of Stephen, was Governor of York, and issued coins in which he is represented wearing a pointed helmet and holding a sword, the reverse being + EBORACI OEDOTS. Other reverses bear Thomas Filius Ulf. Ulf was a moneymen in the previous reign. Amongst the "baronial coins" are those of Robert, Earl of Gloucester; Eustace Fitz John, lord of Knaresborough, who fought against Stephen in the battle of the Standard; and Roger, Earl of Warwick.

¹ N.C. 1896.

In 1684, there were found at Cattal, a coin of Stephen, one of Robert, Earl of Gloucester, another of Stephen and his queen, and one of Eustace.

Henry II. issued silver pennies in 1156 and in 1180, the reverses of the latter having the short cross with four pellets in each angle. Amongst the names of York moneymen that of Isac and Johan (59) occur.

In 1186 the Sheriff of Yorkshire paid into the exchequer £226 6s. 8d. for the donum of the city of York, assized by the King's justices upon the men of the city, not including the moneymen.

In 1756 a hoard of pennies of Henry II. was discovered at Bramham Moor, and amongst them were coins minted at York.

The pennies struck by Richard I. and John bear their father's name (Henricus) but there are however slight differences, such as pearls and curls.

The Pipe Roll 3rd King John (1200-1201) records: "Johon, monetarius at York, and also Everard Bradex, a York moneymen.

In 1208, King John issued writs to the officers and workers of the mints of fourteen of the most important towns (including York) requiring them to appear at Westminster with their dies sealed.

In 1247, writs were directed to the chief municipal officers of the city of York, commanding them, by the oaths of twelve good men, to choose three trusty persons, one to be moneymen, another for the assay, and a third to be custos cuneorum. This was preparatory to the issue of the second coinage.

In 1249 the following were the officials at the York mint:—
MONETARIUS: John of Seleby, Alan Fitz Sanson, Rayner Taliator and Jeremiah of Bedegate. **CUSTODES**: Robt. son of Thos. Verdenel, Thos Yoel, Robt, son of Thomas Alby, Wm. of Akaun. **ASSAIATURES**: Henry Spari and Richard Grusey. **CLERICI**: Andrew of Seleby, Peter de Gamoc, ex parte regis.

The reverses of the earlier coinage have the cross bounded by the inner circle and have pellets in each quarter, while in the second coinage, the cross is simpler and extends to the outer edge and the number of pellets is reduced to three.

During the excavations at the Minster after the fire of 1829, a number of coins was found in the crypt. Seventy-six, dating from the reign of Henry III., are in the Yorkshire Philosophical Society's Collection.

Henry III. issued a gold penny (20d.) in 1257, it was withdrawn in 1270. A penny of this reign was found at York in 1874.

EDWARD I.—GEORGE III. (1814).

In 1279, Edward I. sent for William de Tournmire and his brother Peter and others from Marseilles, and one Friscobald and others from Florence, and employed them in the working of money and the buying and exchanging of silver for that purpose.

On December 8th, the King appointed William de Tournmire master of the mint, and he was to have as many furnaces (30) in London as he can employ, 8 furnaces in Canterbury besides the 3 belonging to the archbishop, in Bristol and York 12 furnaces each. At Canterbury, Bristol, and York Tournmire was to have under him and to bear the expenses and charges of the master of the mint, the keeper of the bullion, the assistant in the melting house and all other persons employed by him, and to deliver the money to the King purified by fire, blanched and prepared at his own cost. The King was to give to him for every pound of sterlings 7d., that is, $3\frac{1}{4}$ d. for wages to the moneymen for striking and working the money, $1\frac{1}{4}$ d. for the loss of silver in the fire, and $1\frac{1}{2}$ d. for adjusting the coins in every pound of money. A penny in every pound was allowed to the master for his wages and expenses and for those under him for meat, drink, liveries, charcoal, and repairing of dies and meltings. The King was to provide houses convenient for working the mint. Master William was to make great sterlings, the value of four lesser sterlings, and also farthings. For every pound of small money the master was to receive $10\frac{1}{2}$ d. for making, and 12d. to remain to the King for his profit out of every pound.¹

The King was at York on the following August 16th, 17th, and 18th. On the third day the keepers of the Exchange were commanded to supply two dies for the archiepiscopal mint of which R. and G. Guydoni became masters. The keepers were to pay £400 out of the new money in the Exchange for household expenses to Master Thomas Bek, keeper of the Wardrobe. On September 10th an order was sent from Carlisle to the keepers of the York Exchange to deliver to Peter de Tournmire, the King's master moneymen at York, £700 by reckoning of the new money to be carried to Newcastle-on-Tyne and there exchanged. The keepers of the Exchange at York were John Sampson and John le Especer.

¹ Ruding.

In December 1299, £3,000 was transmitted from York to Berwick-on-Tweed. In 1300, a royal mint was opened at Kingston-upon-Hull. In June, a large quantity of the base or counterfeit coin, called Pollards, which was lying in the King's exchequer at York, having been received previously to the issuing of the proclamation by which the circulation of them was prohibited, was ordered to be delivered to the merchants of the company of the Friscobaldi of Florence, for the purpose of being melted down, partly at York and partly at Newcastle. In July, 1000 marks were conveyed from York to Lochmaber for the expenses of the King's army in Scotland. In August £1000 was sent to Caerlaverock, and in September two sums of the like amount were forwarded, one to Carlisle and the other to Rose Castle, near that city. Later £1000 was despatched from York to the King at Carlisle.¹

In 1304, the sum of £4000 was transmitted from York to Skamskynell, in Scotland. The money was packed in eight barrels, made for the purpose out of three empty casks. Five carters were engaged for the transit; twelve archers accompanied them, with six men to watch the carriage. Besides these there went John le Conyers and Walter de Gilling, who had the general oversight of the transaction. They set out from York on Monday, April 13th, and that day proceeded no further than Easingwold. The next night they reached Darlington, the night after Chester-le-Street, and during this stage six esquires on horseback were added to the escort, for whose services six shillings were paid. On Thursday night they reached Morpeth, on Friday Bamborough, on Saturday Berwick, on Sunday Dunbar, and on Monday Edinburgh. On Tuesday they arrived at Lynlisku, and on Wednesday at noon they placed the treasure in a barge of the King's at Blakenasse.²

In 1305, John de Sandale, who was assay maker and keeper of the Exchange in England, was appointed *Custos Cambrium* of London, York, Canterbury, Bristol, Chester, Newcastle-upon-Tyne, Kingston-upon-Hull, and Exeter. There were also mints at Berwick and Durham.

Edward I. struck silver pennies (60) at York and also introduced silver halfpennies and farthings; previously these were supplied by cutting the penny into halves and quarters. In the inscriptions

¹ Davies, p. 70.

² Joseph Hunter, "Proc. Archæ. Inst. York, 1846."

the name of the place of mintage was retained, but that of the moneyer was omitted. Titles were added to the name of the King thus:—"EDW. R. ANGL. DNS. HYB." On some of the York coins of 1300 there is a star on the King's breast. On two of Edward II.'s pennies struck at York, which are in the National Collection, his name reads EDWAR or EDWARD.

In July 1320, the sum of 2050 marks was transmitted from London to York. Eight horsemen were employed to guard it on its way to Huntingdon. The journey was of two days, and the sum they received for the service was 16s. They were ten days in going from Huntingdon to York, during which time there was a guard of eleven horsemen, who received 5*s.* for the service. But beside these there were twelve archers, who were in attendance all the way from London to York. At Huntingdon six score men were engaged to attend for five miles, on account of the thieves in those parts; and at Stamford nine score men were engaged to attend for twelve miles, on account of the same kind of danger. In the next reign, namely, in 1339 £200 was sent from York to Newcastle. The journey was performed on the 6th, 7th, and 8th of December. The money was carried in panniers on a horse's back, and there were two men at arms and four archers to guard it.

In 1335 the Statute of Money was passed at York. From henceforth "no religious or any other man should carry any sterling, nor silver in plate nor vessel of gold or silver, out of the Kingdom, without a license. No sterling, halfpenny or farthing shall be molten to make vessels, etc. No false money nor counterfeit sterling shall be brought into the realm. All manner of black money which had been commonly current in the King's realm shall be utterly excluded." In this Parliament it was determined that halfpennies and farthings should be coined.

In 1344 an Act was passed ordering money of gold and silver to be made in the City of York by the coiners and moneymen of the King in the same manner as in the Tower of London.

The following year Anthony-By-the-sea was appointed warden and supervisor of the mints of London, York, and Canterbury; and Conrad Roger and his associates, Eastland merchants, were authorised to hold exchanges in the same three cities, the King engaging that they should not be compelled to exchange more than 1000 marks per week in London, and 500 marks per week in each of the cities of York and Canterbury. About this time, two

goldsmiths named Sibert and John from Cologne (Colonia), and two moneymen named Lawrence and Bonache from Florence, came to York and were admitted to the freedom of the city.

In 1353, Henry de Brussels, who had previously been the King's mint master at Calais, was made master of the works of the King's moneymen at York; and William de Rockewell, the warden of the Tower mint, was commanded to deliver to him for the use of the York mint, six standards and eighteen tressels for making the King's money of the die called the gross; four standards and twelve tressels for the half-gross; and three standards and twelve tressels for sterlings. William Hunt was appointed keeper of the exchange at York and was to receive 12d. per day, provided he accounts to the King for the profits arising from the said exchange.

Edward III. issued a mandate to the Sheriff of Yorkshire stating it to be the King's pleasure that the money struck from gold and silver dies in the Castle of York should be made in the same manner as at the mint in the Tower of London; and that Henry de Brussels, the master of the Tower mint, and William Hunt, keeper of the exchange in the city of York, were authorised to put into repair and, if necessary, rebuild the houses for the works of the mint in the Castle of York which stood in need of repair; and requiring the Sheriff to assign to the same officers, houses and places within the Castle of York suitable for the purposes of the mint and also a strong house in the same castle in which they could keep securely the said money. In the 28th and 29th years of Edward III. the value of the silver bullion coined at York amounted to £1892 5s. 9d.

Groats and half groats were added to the coinage of the York mint, which previously issued silver pennies, halfpennies and farthings. Additional titles to the King's name were given on the groat and half groat as D G (Dei Gratia) and King of France. An inner circle appeared on the reverse and contained the mint name, whilst on the outer circle was the motto, "Posvi Deum Adjutorem Meum" (I have made God my helper).

The gold coinage of Edward III. consisted of florin, half florin, and quarter florin. The florin was withdrawn and gave place to the noble, half noble, and quarter noble. The noble, a beautiful coin, depicts the King, with sword and shield, standing on a ship.

The ransom of David Bruce was paid by instalments during several years towards the close of the reign of Edward III. The instalments, usually 4000 or 6000 marks, were paid to the Sheriff

of Northumberland, who was to deliver it to the Sheriff of Yorkshire, at the city of York. In the 48th year of Edward III. John Fenwick, the Sheriff of Northumberland, received 4000 marks at Berwick, which he conveyed to York, going himself with it, and having a guard of seventeen men at arms and nineteen archers. He set out on June 23rd or 24th, and did not reach York till the 4th of July. Percyhay, then Sheriff of Yorkshire, received it, and sent it forward to London under the charge of six esquires and eighteen mounted bowmen. They were ten days going and returning. The successive halting places for the night were Doncaster, Newark, Stamford, Caxton, Waltham, and London. He returned by Royston, Stamford, Tuxford, and Sherburn.¹

No other provincial mints were in operation during the reigns of Richard II. and Henry IV. than those of the cities of York and Durham. Silver pennies were coined at York during the two reigns and also in the reign of Henry V. In 1423, Bartholomew Seman otherwise Goldbeter, a London goldsmith and under Henry V., mint master at London and Calais, was authorised to coin at York and Bristol as well as at London and Calais. He was sent to York to coin there the gold and silver of the said country that was not of right weight and to remain there during the King's pleasure. Soon after Goldbeter arrived at York, he reported to the lords of the council that the houses and buildings for the making of the King's money in the Castle of York were so ruinous and wanted so much repair that they were not fit for the purpose. On April 8th, 1423, a writ was issued to the Sheriff commanding him to cause them to be sufficiently repaired and amended, or if necessary new buildings to be erected at the discretion of the mint master. The new or the renewed buildings comprised a dwelling-house for the moneyer and his servants, a melting-house with the requisite furnaces, and a treasury. The cost of the same was £88 8s. 5d.²

On July 15th, 1423, Goldbeter was constituted warden and changer of the King's exchanges of gold and silver in the city of York. On the 20th, Thomas Roderham was made comptroller, exchanger, and assayer; and Thomas Haxey, warden of the mint at the city of York.

¹ Joseph Hunter. " Proc. Archæ. Inst. York, 1846."

² The detailed account rendered by Sir W. Harrington, Sheriff, is printed by Davies, p. 72.

“ In the Parliament held in October, 1423, the Commons of the counties of York, Northumberland, Westmorland, Cumberland, Lancaster, Chester, Lincoln, Nottingham, Derby, bishopric of Durham, and all parts of the North, petitioned the King and the Lords spiritual and temporal, stating, that in consideration of the provision in the statute of the ninth of the late King, which forbade the currency of gold under the lawful weight the last Parliament had ordained, at the suit of the said suppliants, that the master and worker of the King’s monies, within the Tower of London, should come to York, there to coin the gold and silver of the said country which were not of legal weight, and to remain there during the King’s pleasure. By virtue of which ordinance the said master was at York, and there placed his mint to the great profit of the King, and ease of the said counties. But that the said master and his workmen had since returned from thence, wherefore the King’s lieges, in the said parts, for their private convenience, commonly received and paid light gold, at rates and abatements, against the ordinance of the statute aforesaid, in contempt of the King, and to his and his people’s loss. They therefore prayed that the master of the mint should be commanded to return to the said city there to coin as he had done before, and to remain, or leave there his sufficient deputies, for whom he should be responsible, during the King’s pleasure. And also that it might be enacted, that all the gold, of the said parts, which should be deficient in weight, should be brought to the Castle at York, there to be coined, before the Feast of St. Michael next. And that no gold, not of just weight, should be current thenceforward in payment, nor have course within the counties aforesaid, nor elsewhere within the realm, and that proclamation to that effect should be made throughout the realm. This petition was granted by the said Lords, with the assent of the Commons in Parliament assembled.”¹

Goldbeter appears to have returned. The account of the monies coined at York was to extend from October 16th, 1423, to August 7th, 1424. On the death of Goldbeter, William Russe, jeweller, of London, was appointed master of the mints of London, Calais, Bristol, and York. Russe was succeeded by John Paddesley, who had been exchanger in the reign of Henry V.

During the reign of Henry VI., the mint at York issued groats, half groats, pennies and halfpennies. At the restoration of Henry

¹ Ruding, vol. 1, p. 269.

VI. on October 1470, gold coins—angels and angelets—were minted at York, having the lys as the mint mark. St. Michael is shown slaying the dragon. The reverses are surrounded by Latin inscriptions, that on the angel signifying “By Thy Cross, save us, O Christ, our Redeemer,” and that on the half angel “Hail, O Cross, our only hope.” Of silver coins, groats and half groats were issued, on the King’s breast is the letter **E** for Eboracum.

The York gold coins of Edward IV. were the rose noble issued 1465-1470, the half rose noble, and the quarter rose noble. They bear respectively Latin inscriptions rendered as follows: “But Jesus passing through the midst of them went his way” (Luke iv. 30); “O Lord, rebuke me not in Thine indignation” (Ps. vi. 1), and “He shall be exalted in Glory” (Ps. xii. 9).

The silver coins were groats, half groats, pennies and halfpennies, bearing CIVITAS EBORACI on the reverses. The York mint marks are the rose, sun, or lis.

The bullion received at the York mint for the purpose of being coined was :

From Michaelmas 1469 to Michaelmas 1470—

Silver, £1312 6 0 Gold, £88 0 0

From Michaelmas 1470 to Michaelmas 1471—

Silver, £242 8 0 Gold, £54 7 10¹

At the close of 1469 Edward IV. was dethroned, but in 1471 was restored.

The York mint was kept employed during the reigns of Richard III., Henry VII., and Henry VIII.

Henry VII. in 1503, altered the type of silver coin, the King’s portrait being given in profile, whilst on the reverse the shield is prominent, the mint name being omitted. At York, during the reigns of both Henrys, silver groats, half groats, pennies, and half pennies were coined.

In the reign of Edward VI. the King’s mint master at York was George Gale, goldsmith, of York, who had been under-treasurer of the mint during the reign of Henry VIII. George Gale was Sheriff of York in 1530, and Lord Mayor in 1534 and 1549. He was the ancestor of Dr. Thomas Gale, Dean of York, father of Roger Gale and Samuel Gale, the eminent antiquaries. One of the mint master’s daughters married Sir Thomas Fairfax, father

¹ Davies, p. 38.

of the first Lord Fairfax, of Denton, whose son and grandson were the distinguished parliamentary generals.

The York mint coined sixpences and threepences of the proper standard, the mint marks being a pierced mullet and spur rowell, the latter of which is rare. The pennies and halfpennies were made of base metal in obedience to a specific order of the Government. On September 24th, 1551, the King in his journal notices the order of council, "in the city of York and Canterbury should the small money be wrought of a baser state." This order was revoked in March 1552, and on April 9th the officers of the York mint replied to the Lords of the Privy Council, stating "that they had stayed the base standard of all small money." "Notwithstanding," the mint master adds, "I am charged at this present to the King's subjects for money received into the office to the sum of vi^c pounds and better, and how or what order shall be taken for the discharge of the same. I most humbly beseech your good lordships to know your further pleasure; and there lieth in the base standard aforesaid in ingot, plate, and cicell, a certain quantity; and we have coined of the said standard of small moneys viii^c pounds, whereof it is almost dispatched unto the subjects according to the order taken by an indenture for the same, so that the rest that remaineth of the small monies will not be able to bring forth the other fine monies according to the order taken, which ought to be given to the King's Majesty's subjects, wherefore we most humbly beseech you to consider the same.¹ George Gale, John Winde, and Richard Lee."

The penny has on the obverse, in place of the King's head, a full blown rose and Latin inscription rendered, "a rose without a thorn."

After the death of Edward VI. the practice of coining in the provincial mints entirely ceased, except for a short period during the troublous times of King Charles I., and again for the great re-coinage in the reign of William III.

Elizabeth, on September 27th, 1560, issued a proclamation by which the base coins of her predecessors were reduced to their real value, namely: the penny to $\frac{3}{4}$ d., the twopence to $1\frac{1}{2}$ d., and the testoon or sixpence to $4\frac{1}{2}$ d., except those testoons bearing either a lion or rose or harp or fleur-de-luce, which were so bad that they were reduced in value to $2\frac{1}{2}$ d. Much difficulty having arisen from

¹ Davies, p. 44.

the difficulty of distinguishing the testoons of $2\frac{1}{4}$ d. from those of $4\frac{1}{2}$ d., a further proclamation was made on October 9th, in which those of $4\frac{1}{2}$ d were to be marked with a portcullis before the face of the King, and those of $2\frac{1}{2}$ d with the print of a greyhound behind the head of the King. Twenty-four stamping irons with the device of the portcullis, and twelve with the greyhound, were transmitted to York with directions to use them according to the tenor of the proclamation. York Museum possesses a coin of Edward VI. of very base silver, countermarked with a greyhound behind the head of the King. In April, 1561, the stamping irons were returned to the London mint with a letter signed Percival Craforth, Mayor of York, and his brethren aldermen of the same. A week later, the Lord Mayor received from the Lords of the Privy Council a communication from which it appears that the base money has not been carried into the mints so freely as was expected, and that some delay had occurred in obtaining new money in lieu of it.

CHARLES I.

“The York mint appears to have been established in 1629, and probably remained in operation till the city surrendered to the Parliament in 1644. The dies for the early coins were executed from models made by Nicholas Briot. They are therefore not of the nature of money of necessity such as was struck at Chester, Weymouth. &c.”¹ The great Earl of Strafford became President of the North in 1629 and occupied the Manor House; in the courtyard over the doorway is sculptured his coat of arms. In 1633, King Charles stayed a few days at the Manor. In 1639, the King arrived in York on March 30th and resided at the Manor House, where his arms, with the initials C.R., are sculptured over the Jacobean entrance. The King left York on April 26th on his ill-starred expedition to Scotland. Charles I. was again in York in 1640. The following year the Council of the North was abolished and Strafford beheaded.

The Manor House was outside the city walls, but the mint for security was situated within the walls, and on land belonging to Sir William Saville, a sally-port forming the means of communication between the Manor House and the mint.

¹ “B.M. Handbook of Coins, Great Britain and Ireland,” by Herbert A. Grueber, 1899, p. 121.

When the King, in March, 1642, fled from London, it was to his beloved city of York that he came on March 18th, with the Prince of Wales and the Court. Owing to the troublous times the King stayed within the city walls, in Sir Arthur Ingram's house, on the north side of the Minster. James, the King's son, aged 9, was created Duke of York as a compliment to the city, and on April 20th was invested with the Order of the Garter at a meeting of the Knights in the Chapter House. The royal press was set up in the house (St. William's College) which had been occupied by Sir Henry Jenkins, "and at so short a distance from the royal residence as to admit of quick and unobserved communication between the King and his printer."

The King, in making preparations for having money coined at York from the plate he expected to be supplied with, despatched orders to London for appliances from the Tower. The materials sent by Briot were shipped, but were intercepted at Scarborough, and Briot was called upon by Parliament for an explanation. "About the latter end of January 164 $\frac{2}{3}$ the King's mint began to coin in Sir Henry Jenkins' house,"¹ the house now known as St. William's College.

The coins struck at York were half-crowns, shillings, sixpences, and threepences. The reverses bear a Latin inscription rendered "I reign under the auspices of Christ." On the half-crowns the King is on horseback with EBOR below; the shield on the reverse is either square or oval and garnished. The mint mark is a lion passant. Some have a minute B in the centre of the O of Ebor under the horse, probably for Briot who may have coined them in 1633. A York half-crown of Charles I. was struck on a square piece of metal; it was in the Maxwell Collection and in November, 1888, was sold for £25.

From the death of Charles I. until the year 1672, owing to the want of small change, traders issued private halfpennies and farthings made of copper or brass. From 1665 to 1670 above sixty different York tradesmen² issued these private tokens.

The Government of Charles II. was induced to issue a national copper coinage. In 1672 farthings were put into circulation, and tokens at the same time were suppressed.

¹ Christopher Hillyard, 1644.

² Drake's *Eboracum*, cx.

WILLIAM III.

The last occasion of money being coined at York was in the reign of William III. The debased condition of the silver coins had become so grievous that a new coinage became necessary. In 1696, provincial mints were established at York, Bristol, Chester, Exeter, and Norwich. The old hammered money was called in.

The 'Manor' at York was offered for the purposes of the mint, and Captain Barton, subsequently comptroller for York, reported on it as "fit." The implements for coining were sent from the Tower mint, consisting of one mill, two presses (one for half-crowns and the other for shillings and sixpences), 146 dies for half-crowns, 190 for shillings, and 107 for sixpences. A capital or small Y under the bust of William III. denotes the York coins. The deputy warden received a salary of £120; the assistant engraver, Samuel Smith, £40; and the deputy porter, £20. In December, Clement Hyde and John Smith (from London) came to York. With the one mill it was estimated that £10,000 could be coined weekly. Francis Wyvill was the local mint master. Coining at York continued from September 1696, to April 1698.¹

The quantity of clipt money received at the York mint from July 2nd, 1696, to November 9th, was 212,410 oz. 10 dwts., and of plate 36.475 oz. 2 dwts.; the coin into which it was converted amounted to £70,520 8s. 4d.

IMPORTED AND COINED AT THE YORK MINT IN 1697.

	GROSS WEIGHT.				STANDARD WEIGHT.				NEW MONEY.		
	lbs.	oz.	dwt.	grs.	lbs.	oz	dwt.	grs.	£	s.	d.
By private importers of hammered money at 5s. 4d. per ounce	19,439	10	15	0	19,105	10	12	8	59,546	13	5
By the King's receivers of hammered money at 5s. 8d. per ounce	56.776	0	5	0	55,800	6	2	12	173,911	11	10
By the undertakers, for wrought plate	..	..	..	..	1,539	10	14	0	4,799	6	7
By private importers of bullion	..	..	..	..	1,785	6	6	3	5,564	17	9
					78,231	9	14	23	243,822	9	7

According to these statements, the whole of the money minted at York in 1696 and 1697 amounted to £314,342 17s. 11d.

¹ B.N.J., Miss Helen Farquhar.

In a Report issued in April 1697 it stated that in the mint at York lay dead very great sums of hammered money uncoined. The deficiency at York was above £2,800. There was lost in the melting down of the clipped and hammered money, 2040 lbs. in weight in the standardizing. Mr. Barton was the deputy comptroller of the York mint.

Major Wyvill, the mint master, built a house in Blake Street, and died there in 1717, aged 70. The house is that which is occupied as offices by Messrs. Cowling and Swift, solicitors.

During the reign of George III. the copper coinage was deficient, and tradesmen's tokens again made their appearance, of which the last York one is dated 1814.

A consideration of our local coinage has added much to the history of our country. Coins are small but durable, and thus have preserved information that is unrecorded elsewhere.



LIST OF COINS
OF THE YORK ROYAL MINT.

II. THE COINS.

Abbreviations: BM. = British Museum. Cat. A.S. Coins 2 vols. Y.M. = York Museum. O. = Obverse. R. = Reverse. CB. = Carleyon-Britton Sale Cat. 1913. N.C. = Numismatic Chronicle. B.N.J. = British Numismatic Journal. H. = Hawkins Silver Coins. 1887. l. = left. r. = right. The Numbers in brackets refer to the coins shown on the Plates.

THE ANGLIAN KINGDOM OF NORTHUMBRIA.

EGGFRID, 670-685.

+

1. O. + E⁺EGFRID REX.

LV

R. XX a letter of which occurs in each arm of a rayed cross.

The only specimens are the four or five copper coins found in Heworth Chapelyard, Durham. Two are in the BM., pl. XX, 1.

ALDFRID, 685-705.

♦

2. O. + ML⁺DERI⁺u2.

BM., 1 silver, pl. XX, 2.

R. Quadruped walking to l.

Rashleigh Collⁿ 1 copper.

UNNAMED.

3. O. Three quarter figure holding a crozier.

R. Horned animal to l. with long tail curved through its legs.

YM. (79) found at York 1885. Æ. Archbishops mint.

4. O. Profile to l.

R. A bird.

YM. (49) found in York 1886.

EOTBERHT (Eadberht), 737-758 (took the tonsure).

+

5. O. E⁺OTBERE⁺hV⁺T.

R. A horned animal walking to r. fore paw raised.

YM. (44). BM., 1. C.B., 177, £ 5 $\frac{3}{4}$. A variety with cross surrounded by a circle of dots. BM., pl. XX, 4. CB., 176, pl. VI, £ 7 $\frac{1}{2}$.

⊕
6. *O. EOTBERhTVΓ.*

R. A horned animal to r. fore paw raised, and kicking with hand leg.

BM., pl. XX, 7.

⊕
7. *O. EOTBEREhTVΓ.*

R. A horned animal to r. with cross above and arabesque below. YM. (43). BM. CB. 179 animal to l. £ 2.18.0.

8. *O.* As above.

R. A horned animal to l. fore paw raised and an arabesque below. YM. (42) found at New Gas Works.

A variety with animal to r.

⊕
9. *O. EOTBEREhTVΓ.*

R. A horned animal to r. and four circles of dots enclosing a pellet.

BM., pl. XX, 5.

Of Eadberht's coins the BM. has 8, pl. XX, 4, 5, 6, 7, 8, the name is rendered in four ways. — CB. 7, pl. VI, 176, 177, 178, 179. YM., 3.

ÆTHELWALD, 760-766. For two coins bearing the name of this King and Ecgberht, Abp of York, see the Archiepiscopal Mint.

ALCHRED, 765-774.

⊕
10. *O. + ALCHRED.*

R. A horned animal to r. paw raised and cross below. AR.

BM. Three coins, pl. XX, 9, 10. CB. one coin, pl. VI, 181, £ 11 $\frac{1}{4}$.

EDILRED I, 774-777 and 790-796.

⊕
11. *O. EDlΓhED.*

R. A horned animal to r. arched tail and an arabesque. AR.
Found at Hornsea, April 1875. Lord Grantley.

⊕
12. *O. ED+LRED.*

R. SZΞICVD (shrine) S(epulchrum) S(an)C(t)I CVD(berht).
Lord Grantley. Coin minted at York or Chester-le-Street¹.

1. Si Cuthbert's pennies. Lord Grantley, B.N.J. 1911.

ELFWALD I, 778-789.

+

13. *O. EΕVΛNDVS* (Efvaldus).

R. A horned animal walking to right. AR.

◊ +

BM., pl. XX, 11. Rashleigh Collⁿ 2. Lord Grantley, 1.

+

14. *O. FNVΛNDVS.*

+

R. SCVDbEVRT (St Cuthbert). AR.

Lord Grantley.

STYCAS (Copper).

OSRED II, 789-790.

◊ :

15. *O. + ORSE REX* (retro).

○

R. HEΛMH. AE.

Montagu Collⁿ.

EARDWULF, 796-806.

Moneyers : Dadean, Eadvini, Eardulf, Edelhelm, Ediluth, Eoenred, Fordred, Huætred, Monne, Odilo, Redulf and Wulfrid.

+

16. *O. + EΛRDVVLF.*

○

R. + EDEΓHEΛH.

The names are often blundered and retrograde.

YM., 32 coins. BM., 7 coins, pl. XX, 12, 13, 14. CB., 7 coins.

※

17. *O. + EV+R.:DΛΓ.:F* (retro) (Eardulf).

+

R. + REDVVLF (retro). YM., 25 coins.

HOAUTH (King ?) end of Eardulf's reign.

+

18. *O. + HOΛV-D RE* (retro).

+

R. + HVLETRD (retro). YM., York find 2.
One coin in Haywood's Collⁿ. NC., 1900.

19. *O.* + ⁺ ID: HVOERE.

⁺
R. + HERRED. YM., York find.

20. *O.* + ⁺ HOΛVΔ RΞ.

⁺
R. + HVΛETRD. YM., 3. Bolton Percy Find.

UNKNOWN (EARDWULF, blundered?)

21. *O.* + [⊕] EHΔEVOE (retro).

⁺
R. + COE: NRED (retro).

YM. York find II, other moneyers are Eardul 6, Odilo and Eored.

22. *O.* + OIΣENT X.

[⊖]
R. + EDELHELM.

YM. York find 4, Bolton Percy Find, 5.

ALFWALD II, 806-807.

Moneyers Eadvine and Monne.

⁺
23. + FΓΕVVIDB (retro).

⁺
R. + EADVINI (retro).

YM., 3 (York, 1 Bolton Percy, 2). Five coins only known.

24. *O.* AFDVVALD.

[⊖]
R. + MONNE. CB. £ 2 $\frac{3}{4}$.

EANRED, 807-841.

Moneyers: — Adulfere, Aldates, Aelser, Alfheare, Badigils, Broder (one in Runes) Coenred, Cudheard, Cunvulf, Daegberht (46). Edenod, Eadvulf, Edelweard, Eadvini, Eanred, Eolnod, Fordred, Fulcnod, Gaduters, Herred, Hendilber, Heardulf, Huaetred, Hunlaf, Leofdegn, Monne, Odilo, Teven, Tidwine, Vilheah, Vulfrid and Wintred.

♦

25. *O. EĀNRED REX.*

♦

R. + EĀDVINI. YM.

The name of Wintred, a moneyer, is given on one coin partly in Runes : —

+ **PINTRM** X.

YM., 763 coins from York and Bolton Percy. Davies Collⁿ 46 from York. BM., 235 specimens, pl. XXI, 1 to 15 inclusive. CB., 90 coins.

• Major Creeke gives 168 examples of varieties of the King's name and title.

ETHELRED II, 841 deposed 844, restored 844, slain 850.

Moneyers: Aldates, Aldhere, Alghere, Anfesig, Anred, Arilred, Bardvulf, Broder, Ceolhard, Coenred, Cudeard, Ceobald, Cunemund, Eadmund, Eanbald, Edelberht, Ediluth, Eanred, Eardvulf, Edelhelm, Eadvine, Erwinne, Edilveard, Fordred, Herred, Hunlaf, Leofdetn, Leofdegn with hound, Monne, Odilo, Ordred, Vendleberht, Vulfsic, Vulfrid and Wintred.

+

26. *O. + EDI:R:BED.*

X

R. + EDIKVΘ (Ediluth). YM. (47).

+

27. *O. + EDILRED REX.*

+

R. + AUGHERE.

The King's name is spell variously as + **AEÐELRED REX**, or **ÆILRED R** and is blundered and occasionally retrograde.

LEOFDEGN MONET occurs on a few reverses.

BM., 370 coins, pl. XXI, 16-23 incl. pl. XXII, 1-14 incl.

CB., 123 coins 4 Illus. one with hound £ 10 $\frac{1}{4}$.

YM., 2592 coins from York and Bolton Percy. Davies Collⁿ 106.

Leofdegn with hound YM., York (50) 2, Bolton Percy 1, R.B. Cook 1.

REDWULF, 844, slain the same year.

Moneyers : — Aldhere or Alghere, Broder, Coened, Cudberht, Eanred, Eardulf, Fordred (Eordre), Herred, Huaetred, Hunlaf, Monne, Odilo, Wintred and Vindelberht.

28. *O. + REDVLF RX.*

R. + ALGHERE. YM. (48).

The name is often blundered.

BM., 34 specimens, pl. XXII, 15, 16, 17. CB. 12 coins.

YM., 121 coins from York and Bolton Percy. Davies' Collⁿ 9.

OSBERHT, 850-867 deposed, restored as joint King with AELLA and slain by the Danes in 867.

Moneyers: — Alered, Anberht, Banwulf, Cudberht, Eanvulf, Eanred, Eadvine, Eardwulf, Edelhelm, Erwinne, Herred, Monne, Ranulf, Viniberht, Vulfrid and Vulfsi.

29. *O. XE REX OSBERHTO.*

R. EANVULF (Eanvulf).

Both names are mostly blundered and retrograde.

A coin similar to No. 29 is impressed on a leaden cross found in Clifford Street in 1884.

BM., 14 specimens, pl. XXII, 18, 19. CB., 8 coins sold for over 19s each.

YM., 188 coins from York and Bolton Percy. Davies Collⁿ 12.

AELLA, 867.

“Coins attributed to this King must be considered very doubtful”.
B.M.Cat.

30. *O. + AEILLIA* (retro).

R. + DIFINI (retro). CB., 226, pl. VI, £ 2.6.0.

31. *O. + AE: IIELA.*

R. IDVI·D. CB., 227, pl. VI, £ 1.1.0.

THE VIKING MINT AT YORK.

HALFDAN, 875-877.

32. Halfpenny. *O. + ALFDENE RX.*

R. : TIIIVV INE CB., 245, pl. VII, £ 80.

+

33. Halfpenny. + **ALF DE NE RX.**

RAINO

R. **ΛΓΔΥΟ** (Regnald).

BM., pl. XXIV, 1.

CNVT (Guthred), 877-894.

34. *Pennies and halfpennies. Four types* (1) cross. BM., 12 P., pl. XXIV, 2, 3, 4, 12.

35. (2) patriarchal cross inverted. BM., 22 P., pl. XXIV, 5-6.
3 H., pl. XXIV, 9.

(3) crosslet at each limb of cross. BM., 2, pl. XXIV, 7. 1 H., pl. XXIV, 10.

36. Type 3. O. **CNVT REX**

+

R. + **EB·IAI·ICT·I·?** YM. (51).

R

37. Type 4 on reverse **K·S.**

L

38. Halfpenny. Type 2. O. **CNVT REX.**

+

R. + **EB·IAI·CEC·IV.**

Six found at Cuerdale¹. CB., 2 pennies and a halfpenny of Type 2, £ 9.

For coins with religious inscriptions, see Archiepiscopal Mint.

CNUT AND SIEFRED, c. 894.

39. Pennies. Type 2. O. **·CNVT·REX.**

+

R. + **SIEFREDVS.**

BM., 6, pl. XXV, 12-13. CB. one £ 3 $\frac{3}{4}$.

SIEFRED, 894-898.

+

40. Penny. O. + **SIEFREDVS REX.**

+

R. + **EB IA CEC IVI.** Type (a) (Type I of Cnut).

BM., 2, pl. XXVI, 1-2.

41. Type (b) (I of Cnut). BM., pl. XXVI, 3.

1. Coins of Cnut were found with reverses **CVNNETTI** (Cunne-Ci = Chester-le-Sheet) and Quentovici.

42. (c) *O. C SIEFRE.*

DIIS REX

R. + EB··IAI··CEV··IVI·· BM., 3 pl. XXVI, 4.

43. (d) *O. C SIEFRE.*

DIIS REX

R. + ED RAI CEC IVI. BM., 3, pl. XXVI, 5-6.

44. Halfpenny. Type d. BM., pl. XXVI, 7. *O. FRE.*
C SIE

R. as 43 YM. (52).

Pennies without mint name.

45. *O. + SI EF RED VS.*

R. + REX at cross ends. BM., pl. XXVI, 8. CB. a coin £ 6.

46. *O. + SI EF RED VS.*

R. + REX at ends of cross crosslets. BM., pl. XXVI, 9. CB one
£ 6 $\frac{1}{4}$.

With name given as SIEVERT.

47. Type (a). *O. RS IE VERT.* BM., 4, pl. XXVI, 10-11.
Halfpenny, pl. XXVI, 13.

48. Type (d). *O. GSIE*
EBT.

R. + EB·IVI. YM. BM., 4, pl. XXVI, 12.

Coins with religious inscriptions are recorded in Chapter IV.

ALWALD, 901-905, see Archiepiscopal Mint.

REGNALD (O'IVAR), 919-921.

49. *O. + REGNĀ·L·D CVNVE.*

R. + AVRA MO·N·IT REG (Aura Moneta Regis).
BM., pl. XXVIII, 4.

50. *O. REGH* (ALD CVNVC?)



R. + BΛ CIALER MONET.

BM., fragment, pl. XXVIII, 5.

EADWEARD THE ELDER, c. 921.



51. *O. + EADVVEARD REX.*

R. PALT Walter Eof (York).



ER EO

BM., II, p. 94. CB. one £4.

Coins with a representation of a church are mentioned on Chapter IV.

SITRIC (GALE O'IVAR).

52. *O. + SITRIC·C·VNVNCE·Ā.*



R. ·ASCOLV MONETR·A. BM., pl. XXVIII, 3.

In the Cuerdale Find were two coins of an

EARL SITRIC.

SITRIC

O. + + +

COMEZ



EVIIDI (Gundebert).

R. FCELDFOR Shelford (on Trent).

BERTVS BM., pl. XXVIII, 1.



AETHELSTAN, c. 927.

Moneyers: — Adelbert, Arnulf, Ædelred, Ecberht, Heldalt, Regnald, Rotbert and Siward.



53. Type 5. *O. + EDELSTAN REX TO BRIT.*



R. + REGNALD MΩ EOFORPIC. YM., 2.

BM., 8, pl. IX, 3.

54. Type 10. *O. + AEDELSTVN RE.*

R. + AENVLF MO EO.

BM., 4, pl. IX, 4-5, other moneyers are Rotbert and Siuard. Boyne gives Elberte and Edelred.

55. Type 11. *O. AEDELSTAN REX.*

R. + HERDATT EBRO +. BM., pl. IX, 6.

56. *O. AEDELSTAN RE.*

R. ARNY BM., 11, p. 116.

+++
LFMOI

Coins with "church" devices are recorded in Chapter IV.

ERIC. — 941 expelled, 948-949, 952-954.

Moneyers Aculf, Hunred, Ingelcar and Radulf.

57. *O. + ERICVS REX A.*

R. HVNR BM., 5, pl. XXIX, 10-11.

+++
ED MO

CB. coin by Ingelcar £ 2.

58. *O. (sword)*
•ERIC
•REX

R. ALVLF MON. BM., 2, pl. XXIX, 12. CB. "Ingelcar" £ 14 $\frac{1}{4}$.
X
#

59. *O. + ERIC MOTI.*

LVDO
R. (sword)
SI \downarrow TR

60. *O. + ERIC REX EF.*

R. INGELGAR M. Another with *O. + ERIC REX EFOR* and
...

R. RADV.
+++
LF MO
...

ANLAF, son of Guthfrith, 939-941.
Moneyers. Bacialer, Farmon and Ingelcar.

61. *O.* + **ONLĀF REX.**

R. + **FARMON MONE.**

BM., 4 (one Ingelgar o) Pl. XXIX, 6, 7.

62. *O.* + **ONLOF REX I:**

R. **BACI**
+++
AFER

BM. two (one 'Ingelgar mo'), pl. XXIX, 8, 9.

ANLAF QUARAN, 941-944, 949-952.

Moneyers: — Ædeferd, Ascolu, Bacialer, Farmon, Ingelgar, Radulf and Sicares.

63. *O.* + **ANLĀF CVNNE M.**



R. + **ASCOLV MONETRA.**

BM., 4, pl. XXIX, 1. CB., one £ 10.

64. *O.* (Raven) :: + **ANLĀF CVNVNC:**

R. + **A-DELFERD MINETRΓ.**

BM., 5, pl. XXIX, 2.

65. *O.* (cross moline). + **ANLĀF CVNVNC.**



R. + **RA-DVLF MONET T.**

BM., pl. XXIX, 3.

66. *O.* + **ANLĀF CVNVNC O** (Eoforwic).



R. + **SICARES MOT.**

BM., pl. XXIX, 4.

67. *O.* + **ANLAF REX ToD (TOT B).**

R. Floral device **RADVLF.**

BM., pl. XXIX, 5.

REGNALD, 943-944.

68. *O.* Head r. + RΛΙΕΝΔΛΤ.

R. ΕΩΣ + ΕΑΡΙΣΣ ΣΤ (Ebraice Civit).

BM., 2, pl. XXVIII, 6-7.

69. *O.* Open hand. + RΑCΙΙΟΔΤ.

R. ΕΩΣ + ΕΙΟΡ·ΑCΙΙ.

BM., 3 pl. XXVIII, 8.

70. *O.* Arrow in Bow. + RΑΟΙCΙΨΛΗ.

R. Thor's hammer + ΙΛΙCΙΩΤΗ:

BM., pl. XXVIII, 9. CB. a coin £ 60 $\frac{1}{2}$.

EADMUND, c. 944.

Moneyers: — Boeg (Boiga) and Ingelcar.

O
+
71. *O.* EADMUND REX EBR.

..
INTEL
R. + + +
LARM
..

This type and moneyer are represented on coins of Anlaf and Eric who were expelled by Edmund in 944. This coin shows the early use of the annulet, CB. £ 5 $\frac{3}{4}$. BM. with no mint name, 9 Ingelcar I Arnulf.

THE YORK MINT OF THE ANGLO-DANISH KINGS.

EADRED, 946-955.

+
72. *O.* + EADRED REX.

..
HVNR
R. + + +
EDMOT
..

BM. No mint name Hunred 7, Ingelgar 4.

EADWIG, 955-959.

+

73. *O.* + EADWIGE RE.

◊◊

DEOR

R. OΞ + NO

VLFM

◊◊

BM., 5, II, pl. XII, 9. Moneyers Deorulf, Eadmund, Eofered, Frard (Efrard) and Frodric. CB. a coin 39 s.

Boyne, 1148, gives two coins with Edelstan and Elfzic as moneyers : —

74. R. EDELZ-ON + EO TAN M (in 3 lines).

75. R. ELFZ ON + EO IE MO (d°).

+

76. *O.* EADPIC REX.

OSPALD

R. T divided by ornament.

◊◊

BM., II, pl. XIII, 4. "This coin is unique ; it may be of York¹". EADGAR, 959-975.

77. Type II. *O.* + EADGAR RE.

◊◊

R. DEOR
OT + EO
VLFMO

BM. (under Tempsford), II, pl. XIII, 12. CB. a coin.

78. Type III. *O.* + EADGAR REX.

R. + FAST·O·LF MON.

BM. No mint name 12 Fastolf and Boiga-Fastolf and Oda and Fastolf and Rafn. Douglas Find² 7 coins Fastolf, Derry Find³ 2 Fastolf.

79. Type VII. + EADGAR REX AN&LOW.

+

R. + DVN MO EOFORPIC.

BM., 4. Moneyers Dun, Fastolf, Manna and Tuma.

CB. Osmund £ 2 $\frac{1}{2}$, Fastolf 1, Manna 2, Dudman Cat. (237)

1. BM. Coins Gt. Brit., 1899, p. 28.

2. NC., 1913.

3. NC. Vol. VI, p. 213.

Pelfril (238), Oda m^{to} Eofrpe £ 1-16-0 (235) had **FASTOLF ES MOT** on both sides.

Without mint name.

80. Type I. *O. + E·A·DGAR RE+·*

R. + + + (Manam)
ΛΜΜΟ
BM., 7.

EADWEARD II (The Martyr), 973-979.

81. Type I. *O. + EADP·EARD REX ANGL.*

R. + BEANIENE (?) M : OFERIC.

BM., 2. Moneyers Beaniene and Dun.

Stockholm Find 1846, moneyer Surclos. Boyne records the moneyer Colgrim.

ÆTHELRED II, 979-1013, 1014-1016.

82. Type I. *O. + EDELRED REX ANGL.*

R. + OBAN MΩO EOFR. YM.

BM., 6. Moneyers Abndorb, Danfin, Fastolf, Osgot, Uri, Thurstan.

83. Var. a CB. two moneyers Dorztalxoln and Oda for both £ 2.

84. Var. b. CB. Moneyer Arncytel and Oscetel.

Type II, var. a. Bust r. Rev. Hand of Providence between Λ and Ω.

85. *O. + E·DELRED REX ANELO.*

R. + EILAF M^{to} EOFER.

BM., 6. Moneyers: — Eilaf, Faellan, Fastolf, Hundolf, Odo and Tumme. CB. sleeve to hand-moneyer-Colgrim. RBC. a coin found at the Red Tower York, Aug. 18, 1847.

Type III. Bust l. Rev. short cross voided, in angles CRV+.

86. *O. + AE·DELÆD REX ANGLOW.*

R. + OBAN M^{to} EOFRPI.

BM., 1, CB. one EOFR.

Type IV var. a (inscription divided by bust) R long cross voided.

87. *O. + ÆDEL·RÆD REX ANG.*

R. + CYTEL MΩO E·OFR.

BM., 7, Moneyers Cytel, Eadric, Leofstan, Odgrim, Sumerleda, Ulfketel and Theodred.

Type VIII. Bust l. in armour. Rev. Voided cross, square centre each corner 3 pellets.

88. *O. + ÆDELRE·D REX ANG.*

R. + COLGRIM MO EO.

BM., 6. Moneyers Colgrim, Hildulf, Irra, Oban, Wulfsige & Durstan.

CNVT, 1016-1035.

Type V. Bust l. crowned with in a quatrefoil.

89. *O. + CNVT REX ANGLOR.*

+

R. + PVLZIGE M·O EOFRI.

Type VIII. Rev. Voided cross and quatrefoil.

90. *O. + CNVT REX ANGLOR.*

R. + COLGRIM MO EO.

BM., 5. Moneyers Colgrim (2), Hildolf, Osgot and Stircol, CB., Fridcol.

Type XIV. Bust l. Rev. short cross voided pellet in centre, in each angle a pellet enclosed.

91. *O. + CNVT TREXA.*

R. + LRIMOLF M·O EOFRI.

YM.

BM., 73. Moneyers : — Ædelwine (3), Arncetel, Arnolf, Asgod (2), Cetel, Crinan, Crucan, Cruru, Fargrim (3), Fardein, Fridcol (2) Godman, Grimolf, Hildolf, Ire, Osgod, Stircol, Sunolf, Surtine, Toca, Widrine, Wulfnod, Wulstan. CB. one Brehtnod.

Var. a. Bust r. BM., pl. XVII-13 moneyer Surtine.

92. *O. + NVEXR TVND.*

R. + ZVRTINE N·O EO.

Type XVI. Bust l. Rev. short cross voided pellet in centre.

93. *O. + CNVT RECX.*

R. + ÆELPINE ON EOF.

BM., 46. Moneyers : — Ægelwine, Ælfwine, Beorn, Colgrim, Crucan, Deorsige, Earngrim, Færdein, Fridcol, Godman, Grimulf, Hildulf, Odan, Rœfen, Uceade, Wulnod, Thurgrim.

Type XVII. Rev. short cross voided central oblong pellet at each angle and in centre.

94. *O. + τNV RECXAN.*

R. + DVRGRIM ON EOFERPI.

BM. CB. one coin moneyer Stircoll.

Type XX var. a. Rev. cross of four ovals, at centre two circles, pellet in inner one.

95. *O. + CNVT REX.*

R. + AEGELPINE ON EOFE.

HAROLD I, 1035-1040.

Type I bust to l. Rev. cross of ovals central circle enclosing pellet.

96. *O. + HARO : LD REX.*

R. + OVFACAN ON EOFER.

BM., 3 (II, pl. XX, 3). Moneyers Dufacan, Swegen and Widir-winne. CB. one, moneyer Arncil.

Type V. Rev. long cross voided, in centre circle, trefoil of pellets in each angle.

97. *O. + HAR OLD REC.*

R. + AEL·FERE ON EOEE.

BM., 4 (II, pl. XX, 4). Moneyers Ælfere, Swegen, Ucede and Widering.

Var. c. Rev. fleur de lys between two pellets in each angle of cross.

98. *O. + HAR·OLD REC.*

R. + O·DIN ON EOFER.

BM., 4. Moneyers Odin, Scula (2) and II Ðurgrim. CB. one, moneyer Lodine.

HARTHACNUT, 1040-1042.

Type VII. Rev. cross voided, **PAX** in angles, pellet in centre.

99. *O. + REX HAR τNVT.*

R. + ERNGRIN ON EOFI.

EDWARD the Confessor, 1042-1066.

Types according to the Brit. Mus. Cat. II, 1893.

Type I. H., 226.

100. *O. + DPA P REX A.*

+

R. + O·DWINE ON EOFE. BM.

Var. a. R. annulet lower edge of circle.

101. *O. EDPARD RE+A.*

R. + AELPINE ON EOFER.

BM., 20 (II, pl. XXIV, 5). Moneyers.: — Ælfwine, Arbetel,

Arncetel (2), Arngrin, Elewine, Iolana, Odin, Raeten (3), Saefuhel (2), Scula (2), Stircoll (2) Ulfketel, Unolf and Durrim.

Type 2. H., 229. Bust l. Rev. short cross voided, pellet in centre.

102. *O. + ERI RO RE.*

R. + L·CI ON EIOER.

BM. 3. Lifice.

103. *O. Halfpenny ... DR....*

R. ... CEN ON EO. BM.

Var. a. Rev. annulet in one arm of cross.

104. *O. + EDPI RD RE.*

R. + ÆLFER ONEOF.

BM., 13 (II, pl. XXIV, 6). Moneyers : — Ælfere (2) Arncel, Arngrim (2) Elfwine, Eola, Ingbleth, Leofnod, Sœfucef (2) Scula and Ðor.

Type III. H., 220. R. cross voided central device forming trefoil of 4 pellets in angles.

105. *O. + EADPE REX.*

R. + ÆLFNERC ON EOFR.

BM. 17 (II, pl. XXII, 7). Moneyers : — Ælfhere, Elfwine (3) Ærngrim, Eltan (3) Erncil, Erncytel, Iurel, Rœfen, Sœfuhel, Scula, Ðor, Ðurgrim (2).

106. Halfpenny. *O. PER R..*

R. + ERN....OFER (Erngrim ?) BM.

Var. b. bust l. with radiate crown, no sceptre.

107. *O. + EDP·ERD REX A.*

R. + O·DEN ON EFRPPIC.

BM. (II, pl. XXIV, 7).

Type V, var. a. R. annulet in one angle of cross.

108. *O. + EDP·RD RE +:*

R. + ÆLPINEE ON EOFERI.

BM., 25 (II, pl. XXIV, 8). Moneyers : — Elfwine, Arncytel, Arngrim (8) Geola, Iola, Leofnod, Scula (4), Styrcol (2) Swertcol, Ulfkil (2) Wintefuhel (2) and Ðorr. CB. coin Winterfuhl £ 4.

109. Type VII. H., 227. *O. + EOPRD REX.*

R. + GODPINE ON EOFER (Godwine). BM.

110. Var. a. *O. + EDPAR·DRE.*

R. + ARNCEL ON EOFER. YM.

YM., 18. Moneyers : — Arncil, Arngrim (3) Feofenoed, Iocil,

Iole, Leofenoed, Rafen, Scule, Spartcol, Ulfceetel (4) Winterfugl, Dorr (2).

— BM., 24 (pl. XXIV, 9) Arncetel (3) Arngrim (4) Iole, Leofnod (2) Rafen (2) Scule (2) Stircol (3) Swartcol (2) Ulfctel (2) Winterfugel (2) and Dorr.

111. *O. Halfpenny + ... ROR.*

R. + DORR ONE.

YM., 2 (other reverse ... L ON EOF).

Type IX. King seated. Rev. martlet in each angle of cross.

112. *O. EDPAD RX ANGORA.*

R. + ARNGRIM ON EOF.

YM., 9. Moneyers : — Arngrim, Iola, Odgrim (2) Scula (2) Snaeburn (2) and Ulfctel.

BM., 5. Moneyers : — Arngrim (2) Iola, Scula, Snœburn. CB. one Dorr.

Var. a. *R.* two annulets.

113. *O. EDPWD RX ANGORA.*

R. + ARNGRIM ON EOF.

YM., 19. Moneyers : — Arngrim (2) Lefnoed Odgrim 2, Scula, Snacburn (4) Ulfctel (4) Ulfkel, Dorr (4).

BM. (II, pl. XXIV, 10). Moneyers : Ioketel. Odgrim, Ulfœtel, Ulfcil, Dorr (3).

114. Type XI. *O. + EADPARD RD RE.*

R. + O-DGRIM ON EOFI. BM.

Var. a. Annulet in one angle of cross.

115. *O. + EDPA RD REX.*

R. + ARCETL ON EOFRP.

YM., 66. Moneyers : — Arcel 4 Arcetel (3) Arngrim (9) Iocitel (2) Iola, Ovdulf, Odbern (6) Odgrim (3) Scula (8) Snaebarn (10) Spartcol 3, Ulfcil (2) Ulfctel (6) Dorr 9.

BM. 17 (II, pl. XXIV, 11). Moneyers : Arcetl (2) Arngrim, Iocitel (2) Odborn (2) Odgrim (2) Scula (2) Snaeborn, Swartcol, Ulfctel (3) Dorr 2.

Type XIII. Var. a. *R.* annulet.

116. *O. EADPARD REX A.*

R. + ARCEL ON EOFERPI.

YM., 31. Moneyers : Arcel (3) Arncetel, Iocetel (2) Ovdolf, Odbern (3) Odgrim (3) Odolf (2) Scula (3) Sneborn, Spartcol (3) Ulfcil, Ulfctel 2 Dorr 5.

BM., 32 (II, pl. XXIV, 12). Moneyers : — Arcel (2) Arnetel,

Arngrim (2) Ioctel (3) Oudolf (2) Odbeorn (3) Odgrim (4) Scula (3) Snœborn (3) Swartcol (3) Ulfel, Ulfketel (2) Ðorr (3).

Type XV. Var. a. Annulet in first quarter.

117. *O. EADPARD REX :*

R. + AL·EIF ON EOFERPI.

YM., 28. Moneyers : — Aleif 3 Aleof, Arctel, Earcil (4) Ioccetel (2) Ovdborn Ovdgrim (2) Ovdorf, Odborn (2) Scula, Senebrn (3) Ulfketel (3) Ðorr (3).

BM., 23 (II, pl. XXIV, 13). Aleif, Aleof, Earcil (3) Ioccetel (2) Ovdbearn (3) Ovdgrim, Ovdulf (12) Scula (2) Senebrn (3) Sweartcol, Ulfketel, Ðorr 2. CB. Aleif-annulet 3rd quarter. Ulfketel annulet 4th quarter.

Type XVII. Rev. 'Pax'.

118. *O. EADPARD REX.*

R. + SENEBRN ON EOFR. BM., II, pl. XXIV, 14.

HAROLD, 6 Jan. 1066—14 Oct, 1066.

119. Type I. *O. + HAROLD REX ANGI.*

R. + ALEOF ON EOFER.

BM., 13 (II, pl. XXXI, 5). Moneyers : — Aleof, Erncetel, Iocetel (2), Leisinc, Ovdgrim, Ovdulf, Snaebeorn (2) Sutere (2) Sweartcol, Ulfketel.

THE YORK MINT FROM WILLIAM I TO EDWARD I.

WILLIAM I, 1066-1087.

Type I. H., 233.

120. *O. + PILLEMVS REX.*

R. + HVRDOLF ON EOFRPI.

YM., 4. Moneyers Hardolf, Odgrim, Ulfketel (2). Also Aleif, Ordbeorn and Ovdulf.

121. Halfpenny cut.

Type II. 'Bonnet'. H., 234.

122. *O. + PILLEMV REX I.*

R. + ALEIF ON EOFERP.

YM., 43. Moneyers Aleif 3, Arcetel, Andolf, Andult 5, Hardvl, Leiging 4, Ovdborn 3, Ovdgrim 8, Rosctel 3, Spearcol Ðorr 9, Ulfketel 4. Other moneyers are Alic, Halsdoff, Ovdolf, Vrce ¹. Winthbeorn ².

1. NC., 1904.

2. Thoresby.

CB. Two coins Spearcol and Ovdgrim £ 3.3.0.
Type III. 'Canopy'. H., 236.

123. *O. + PILLEMVS REX.*
*R. + LEOFPINE ON EQFE*¹.
Type IV. 'Two Sceptres'. H., 237.

124. *O. + PILLEM REX ANGLO.*
R. + HARDOLF ON EOFR.
Other moneyers are Aleif, Alic, Andolf, Ovdbeorn and Ovdgrim.
Type V. 'Two Stars'. H., 238.

125. *O. + PILLEM REX AN.*
R. + AL-DVR ON EFRPI. YM.
YM., 3. Moneyers : Aldvr, Aldurvlf and Hardulf.
Type VI. H., 243.

126. *O. + PILLEM REX.*
R. + HR-DVL ON EFRPR. YM.
YM., 5. Moneyers : — Hrdvl, Hrddolf (2) Dor (2).
Type VII. 'Profile-sceptre'. H. 239.

127. *O. + PILLEM REX.*
R. + LEISING ON EFRPI.
Type VIII. H., 241-242. *R. PAXS* in angles of cross.

128. *O. + PILLEM REX.*
R. + ALEIF ON EFRPIC. CB.
Other moneyers : Leisinc, Vrdbrn and Door.
WILLIAM II, 1087-1100.
Type I. 'Profile-Sword'. H., 244.

129. *O. + PILLEM REX I.*
R. + ALCIF ON EFRPIC.
Other moneyers are Alef and Aleie.
Type II. Sword Cross and Pellets. H., 246.

130. *O. + PILLEM REX.*
R. + LIFPINE ON EOF.
An other moneyer is Alef.
Type III. Two stars. H., 250.

131. *O. + PPILLELM REI.*
R. + LESTIC ON ECFFPPCI.
Another moneyer is Godrep.

1. Find S. Mary Hill Ch, London, 1779. Coin now missing.

HENRY I, 1100-1135.

Type I. H., 251. Bust facing annulet on either side.

132. *O. + HENRI REX.*

R. + BRIHTNO-D ON EOF.

Type III. H., 253. *R.* Pax with two annulets.

133. *O. + HENRI REX.*

R. + BRIRNR-D ON EFR.

Type IV. H., 252. *R.* Tressure, annulet in centre.

134. *O. + HENRI REX.*

R. + RA....ON EBO.

Type IX. H., 264. *O.* rose in front of bust.

135. *O. + bENRICVS R:*

R. ... ON EVER

Type XIV. H., 262. *R.* pointed quatrefoil fleur de lys in each spandril.

136. *O. + bENRICVS RE.*

R. RIC ON EVE.

Type XV. H., 255. Bust $\frac{3}{4}$ to 1.

137. *O. + bENRICVS R.*

R. + VLF : ON : EVERPI.

Another moneyer is Turstan.

STEPHEN, 1135-1154. 1st Type. H., 270. 2nd Type H., 269.

138. *O. + STIEFNE R.*

R. + SIBERN...ER.

139. H., 271. Flag coin. + **STIEFNE R.**

R. Ornament.

Watford hoard. York coins 7. Other moneyers being Martin, Otbo, Turstan and Ulf. Sheldon hoard 1867. H., 270. Avtgrim: on: Ever.

EUSTACE, elder son of Stephen. Governor of York d 1153.

140. *O. O EVSTACIVS + O.*

R. + EBORACI O EDOTS. BM.

Other reverses bear "Thomas Filius Ulf" (the moneyer is Henrys I's reign).

A coin was found at Cattal in 1684 along with one of Stephen and Matilda his wife (c. 1141). Also a coin of Robert Earl of Gloucester, this however has been ascribed to Robert de Brus, who helped the Empress.

HENRY II, 1154-1189.

2rd issue 1180 short cross coinage 4 pellets in each angle.

141. *O. hENRIQVS·REX.*

R. + TONAS ON EVR.

Others moneymen are: — Alain, Everard, Gerard, Godwin, Herbert, Hugo, Humfrei, Isac, Jordan, Nicole. Snd..., Turkil, Willelm and Wulfsi.

Colchester Find, 1903-44 York coins.

RICHARD I, 1189-1199.

The pennies struck by Richard bore his father's (Henricus) name there are however some slight differences e. g. the crown is of pearls, and there are on each side of the face curls.

142. *O. hENRIQVS REX.*

R. + DAVI·ON·EVERY.

Other moneymen¹ are: — Everard, Hve, Nicole, Johan, Peres, Ravle & Turkil. Finds Colchester, 1903. 52 York coins.

JOHN, 1199-1216.

John's pennies bear his father's (Henricus Rex) name, but there are two curls enclosing pellets on each side of the full face.

143. *O. hENRIQVS REX.*

R. IOhAN....

Other moneymen² are: Davi, Everard, Nicole, Peres, Renaud, Tomas and Wilain.

HENRY III, 1216-1272.

144. *O. hENRIQVS REX.*

R.

1248 long cross type 3 pellets in each angle. Moneymen: — Alain, Jeremie, Ion, Rener and Tomas.

145. * *hENRIQVS REX TERAI.*

R. ION ONE VER WIA (Ion on Everwic).

146. *O. * hENRIQVS REX III.*

R. RAN ERO NE...

1. NC., 1897, p. 243.

2. NC., 1865, p. 255.

FROM EDWARD I TO WILLIAM III.

The moneymen's names no longer appear on the coinage. The issue is silver pennies, halfpennies and farthings.

EDWARD I, 1272-1307.

147. Penny. Group II, Jan 1280.

O. + EDVVVR' ANGLDINSHYB.

R. CIVITAS EBO RACI.

Finds York coins. Mellendean 6, Blackhills 6¹.

148. Farthing.

O. + EDVV, etc.

R. As above.

149. Penny. Group III, July 1280. Finds York coins. Mellendean 35, Blackhills 17, in two cases [¶]. Group III, var. b.

150. Penny. Group III, var. c.

151. Halfpenny. — III, var. c.

152. Farthing. — III, var. c. base.

153. Penny. — III, var. d.

154. Penny. — III, var f. Lombardic N.

155. Farthing. — III, var. g. good silver.

156. Penny. Group IX. 1300 var. a, A star on the King's breast. N in two cases thus [¶].

157. Penny. Group IX, var. b. No star.

EDWARD II, 1307-1327.

158. Penny. *O. + EDVVVR R ARCL DNS HYB.*

R. CIVITAS EBO RACI.

EDWARD III, 1327-1377.

2nd issue 1351-1377.

Groats were only struck at London and York.

1. G. Macdonald. Two Hoards of Edward Pennies. N. C., 1913.

159. *O. + EDVVARD◦ D◦ G◦ REX◦ ANGL◦ Z◦ FRANC◦ D◦ bYB◦ MM◦*. Cross patée.

R. POSVI DEVVM ADVTOREM MGV-CIVITAS EBO-RACI (inner circle). Y. M. 3. Balcombe¹ Find 16 York groats all early style, all read **D·G·** have the letter **N** not barred, the arches above the crown are not fleured, and the stops are annulets.

160. Half-Groat.

O. + EDVVARDVS REX ANGL FRANC Z HI MM. A cross.

R. As 159.

Balcombe Find. 8 York Half-groats, unbarred N's. and annulets as stops. 2 York coins in Neville's Cross hoard 1889 both read **FRACI**.

161. Penny. ante 1351.

O. + ED.....NGL DNS bYB.

R. CIVITAS EBORACI. Balcombe Find. Neville's Cross Find, 69 coins.

162. After 1351.

O. + EDVVARDVS REX ANGLI. Mm. across.

R. CIVITAS EBORACI.

Balcombe Find :—

1351-1360. 48 York pennies, saltire on breast 1, no quatrefoils 4, quatrefoil enclosing pellet 5 (Abp's mint).

1360-1369. 30 York pennies.

1369-1377. $\frac{41}{119}$ York pennies, lis on breast 2, annulet on breast 1.

163. *O. + EDVVARD DI GRA REX.*

R. As before. Guisborough Find, 1848.

164. Halfpenny.

165. Farthing.

O. + EDVVARDVS REX.

R. CIVITAS EBORACI.

RICHARD II, 1377-1399.

Silver pennies coined at York Durham and London.

166. Fine work.

O. + RICARD◦ REX ◦ ANGL◦ F.

R. GIVI TAS EBO RACI.

BM.

167. Another reads **ANGL◦ S ◦ FRANC** and has a trefoil or cross on the King's breast, and an escarpment after **TAS**.

168. *O. + RICARDVS × REX × ANGLI* or *ANGLIA*. Cross on breast, pellet over each shoulder and *R.* as above.

169. Rougher work.

O. + RICARD: REX: ANGL: DRS·ED. Saltire on breast.
R. QIVI TAS EBO RADI.

170. Another reads.

O. + RICARDVS × REX × ANGLIA. Saltire on breast.

171. Var. escalloped after **TAS**.

172. Another has a Roma N in *Anglie* ¹.

Balcombe Find, 10 York pennies (9 fine, 1 rough).

HENRY IV, 1399-1413.

Pennies 1st issue 'heavy' London and York.

173. *O. + HENRIC REX ANGL Z FRANC.*

R. CIVITAS EBORACI.

2nd issue "light" Durham, York and London.

174. *O. + HENRIC × REX × ANGL Z FRANC.* Cross.

R. QIVITAS EBORACI.

175. Guisborough Find two "HENRICVS".

HENRY V, 1413-1422.

Pennies. Durham, York and London.

176. *O. HENRIC × REX × ANGLIA* $\not\times$ F. Mm. pierced cross.

R. QIVI TAS EBO RADI.

177. *O. HENRICVS × REX × ANGLIA.*

R. QIVI TAS EBO RADI.

178. *O. HENRICVS × REX × ANGLIA.* Smaller coin.

R. QIVI TAS EBO RADI.

179. Trefoil issue. *O. HENRIC × REX × ANGLIA* $\not\times$ F.

R. QIVI TAS EBO RADI.

180. 4th Type. *O. HENRICVS × REX × ANGLIA.*

R. QIVI TAS EBO RADI.

1. F.A. Walters. N.C., 1904.

181. Annulet coinage. *O. HENRI^{VS} REX ANGLIE.*
R. CIVI^{TS} EBO R^{AI}AI.

HENRY VI, 1422-1461, restored 1470-1471¹.

I. Annulet Coinage, 1422-1428. Mm. pierced cross .

Groats, Half-Groats, Pence and Halfpence struck at Calais, London and York.

182. Groat. *O. + HENRIC^{DI} C^{RA} REX ANGLIE Z FR^{AN}Q^A.*

R. + POSVI D^{EV}O^W ANDIVT^OR^E W^{EV}O^W (outer circle)
CIVIT^{TS} EBO R^{AI}AI (inner circle). BM., 3.

183. Half-Groat similar to the groat. Two only known.

184. Penny. *O. + HENRI^Q REX ANGLI.*

R. + CIVIT^{TS} EBO R^{AI}AI. BM.

185. Similar. Mullet to l. annulet. to r. of crown. R. Annulet in one quarter of pellets no quatrefoil. Var. trefoil or lis to r. of crown.

186. Halfpenny, similar to 3.

II. Rosette. Mascle Coinage: 1428-1435.

187. Penny. Mm. cross fleury.

O. + HENRI^{VS} (1) REX (2) ANGLIE. (1) rosette,
(2) mascle. Mullet at each side of crown.

R. + CIVI^{TS} (1) C^{RA} (2) EBO R^{AI}AI. (1) mascle, (2) rosette.

III. Pine Cone. Mascle Coinage, 1435-1440.

188. Penny. Mm. cross fleury-rosette on breast.

O. + HENRI^{VS} (1) REX (2) ANGLIE. (1) pine cone,
(2) a mascle.

R. + CIVI^{TS} (1) C^{RA} (2) EBO R^{AI}AI. (1) pine cone.

IV. Trefoil Coinage. "No half-groats, pence or halfpence are known having the trefoil at the sides of the neck".

V. Pine Cone Pellet Coinage, 1440-1459.

Penny. Leaf under chin.

189. *O. + HENRI^{VS} REX ANGLIE.*

R. + CIVIT^{TS} EBO R^{AI}AI.

1. F. A. Walter. N.C., 1902 and 1910.

VI. Cross and Pellet, 1459-1460.

190. Penny. Saltire on King's neck, pellets at sides of crown and in two quarters on the Reverse.

VII. Light Coinage Restoration Henry VI, Oct. 1470 to April 1471.

Gold. Mm. lis.

Angel, 6 s. 8 d.

191. *O. HENRIQ D^EI C^RA R^EX A^NG^L Z F^RA^ND^AI^E.*
St. Michael (cross in nimbus) slaying the dragon.

R. P^ER C^RV^A T^VA S^AL^VA N^O X^PA R^ED^EM^TO^R. Lis
b to l., lys to r. of cross over ship. BM.

192. Half-Angel. *O. HENRIQ D^EI C^RA R^EX A^NG^L Z F.*

R. O C^RV^AX^AV^AS^AP^ES V N^IA^TA. h and lys on either side
of shield. BM.

Silver.

Groats minted at London, Bristol and York.

193. *O. + HENRIQ D^I G^RA R^EX A^NG^L Z F^RA^ND^A.* On
breast **G** for Eboracum, mm. lis.

R. As 182. One coin with mm. a rose.

Half-Groats. London and York only.

194. *+ HENRIQ D^I G^RA R^EX A^NG^L Z F^R.* Mm. lys and
G on the King's breast.

R. As 182. BM. (only two known).

EDWARD IV, 1461-1483.

Gold. Rose Noble 100. The King standing in a ship.

195. *O. EDVVARD D^I C^RA R^EX A^NG^L Z F^RA^ND^A.* Mm.
a sun **E** under ship for Eboracum.

*R. I^HA T^VA T^RA^NS^IA^NS P^ER O^ED^IV^O I^LL^OR^V^O
IBA^G.* A rose in the centre of the Sun, with fleur de lys and
crowned lions within on octafoil.

196. *O.* As above with addition **D^RS^IB**. Mm. a lis.

R. As before.

Half-Rose Noble or Half-Royal.

197. *O.* As 195. Mm. a sun.

R. D^OM^IN^E R^A I^N F^UR^OR^E T^VO T^RGV^AS M^A.

Quarter Rose Noble or Quarter Rial.

198. *O. EDVVARD DI CTRA REX ANGL. Mm. lis or cross.*
R. EXALTBITVR IN GLORIA. Mm. lis or rose.

Silver. Groats 2nd issue, initial of mint or the King's breast.

199. *O. EDVVARD DI GRA REX ANGL Z FRANC.*
G on breast. Mm. lis.
R. POSVI DAVM ADIVTORE MVM CIVITAS EBORACI. Mm. lis.

Boyne 4, Guiborough Find 4. One coin has mm. on *O.* lis and *R.* sun.

200. Half-Groat. *O.* As before. Mm. lis.

R. As before. Mm. lis.

201. Penny light. *O. EDVVARD DI CTRA REX ANGL*
G for Eboracum. Mm. a rose.
R. CIVITAS EBORACI.

202. Halfpennies, 2nd issue. *O. A* instead of **ANGL**.

EDWARD V. 1483. Coins struck in London only.

RICHARD III, 1483-1485.

203. Groat. *O. RICARD DI CTRA REX ANGL FRANC.*
R. POSVI DAVM ADIVTORE MVM CIVITAS EBORACI. Mm. united rose and sun.

Boyne one, mm. (Obv. only) dimidiate rose and sun.

HENRY VII, 1485-1509.

204. Half-Groat. *O. HENRICI DI CTRA REX ANGL Z FRAN.*
A rosette between each word.

1485. *R. POSVI DAVM ADIVTORE MVM CIVITAS EBORACI.* Mm. lis.

205. 1489. *O. HENRIC DI CTRA REX ANGL.* Full face with arched crown.

R. As 204. Mm. a martlet on both sides.

HENRY VIII, 1509-1547.

1543. Groat, debased silver.

206. *O. HENRIC D·C·A·NGL·FRA Z HIB REX.* Mantled bust.

R. CIVITAS EBORACI. Two trefoils before and after each word. BM.

207. Half-Groat. *O. H̄ENRIC 8 D 5 AGL FR Z HI REX.*
R. CIVITAS EBORACI. Y.M. BM.

208. Penny. Fine and debased silver struck at York.
O. H·D·S·ROSA SINE SPA.
R. CIVITAS EBORAC. BM.

209. Halfpenny. Debased. *O.* and *R.* as 208. BM.

210. 1545. Half-Groats struck at York.

211. 1545. Penny, as 208 but **EBORACI**.

EDWARD VI, 1547-1553.

1551. York coins proper standard.

212. Sixpence. *O. EDVVARD VI D G AGL FRA Z HIBER REX VI.* Mm. a mullet pierced.
R. CIVITAS EBORACI.

213. Threepence. *O.* as 212 except **HIB** for **HIBER** and **III** for value.

R. As 212.

Boyne had a sixpence and threepence with mm. a spur rowell.

Penny (base), 1551.

214. *O. ED 5 ROSA SINE SPINA.* Full rose mm. mullet pierced.

R. CIVITAS EBORACI. YM., 2.

ELIZABETH.

215. Base shilling Ed. VI, countermarked behind the King's head with a grey hound for issuing at $2\frac{1}{4}$ d. YM.

CHARLES I, 1625-1649.

C = Clark's Collⁿ Sale, Cat. Jan. 1914.

Half-Crowns. Hawkins gives 7 types, 1 ground under horse 2 rev. oval shield garnished.

216. (H 3). *O. CAROLVS·D:G·MAG·BRI·FR·ET·HI·REX.* Mm. a lion.

R. CRISTO AVSPICE REGNO. Circular garnished shield. C. Var. square shield between **C** and **R**.

217. C. (H 4). *O.* As 216 except **HIB** for **HI**. Mm. a lion. **EBOR** below the horse.

R. As 216. Var. **BRIT·FRA·ET HIBA.**

218. (H 5). *O.* As 216. **BRIT FRAN ET HIB.** Horse tall with **EBOR** under.

R. **CHRISTO**, etc. Square plain shield crowned. C 2.

219. (H 6). *O.* As 216 except **BRIT FRAN ET HIB.** Mm. a lion **EBOR** under horse.

R. Oval garnished shield. C 4.
Two sold for £ 2 $\frac{1}{5}$. Variety smaller shield.

220. C 3 (H 7). Rev. oval shield with lions head and claws in the garniture.

Two half-crowns type 2 and 5 sold for £ 3-2-6 (Dudman).
B in centre of the **O** of **EBOR**.

221. B probably for Briot-struck at York 1633? N.C., 1906.
Square Half-Crown.

222. A York half-crown struck on a square piece of metal, was sold for £25 in Nov. 1888. Hon. Robt. Maxwell's Collection.

Uncertain.

Hawkins (2nd Ed.) describes 15 half-crowns resembling those of York Shillings.

223. C. (H 1). *O.* **CAROLVS D·G·MAG BRI FRA ET HI REX· XII.** Mm. a lion.

R. **CHRISTO**, etc. Square shield on cross fleurie **EBOR** above.

224. (H 2). *O.* As 190 except **FR**. Mm. a lion crowned bust in armour and mantle to l.

R. **CHRISTO O·AVSPI CE·REG·NO.**

225. C. (H 4). Circular garnished shield no cross.

226. C. (H 4.). Oval garnished shield crowned, **EBOR** below.
C 2. Var. **BRI·FRA.** Circular garnished shield. **EBOR** below.

227. C 3 (H 5), Profile to l. crowned **XII** for value.

R. Oval shield with lion skin garniture crowned, **EBOR** below.
Uncertain.

There are a number of more or less imitations of York shillings.

Sixpences.

228. *O.* Similar to shilling but **BRIT FRAN ET HIB· VI** for value. Mm. lion.

R. Oval shield garnished crowned between **C·R·** both crowned.
Var. without initials **C·R·**.

Threepence.

229. Similar to 223 but **MA BR** and **FR III** for value. Mm. lion.

WILLIAM III¹.

O. GVLIELMVS DEI GRATIA. Kings bust laureated.

R. MAG BR FRA ET HIB REX (date). Shields of England, Scotland, France, Ireland and Nassau (in centre) arranged cross-wise.

Roman Y. Series. Rare.

230. Half-Crown, 1696. Large shields edge “octavo”. Mentioned by Hawkin but its whereabouts is unknown.

231. Shilling, 1696. Knobbed harp, 6 strings. BM. specimen 5 strings.

232. Shilling, 1697. Bust, ends of fillet are apart.

233. Sixpence, 1696. Deformed harp, 3 strings.

234. — 1697. The ends of fillet are short and blunt. Hawkins.

235. — 1697. Hooked transverse harp, 4 strings. BM., one 5 strings.

Old English y series.

236. Half-Crown, 1696. Small shields knobbed harp, 5 strings. Edge “octavo”.

237. — Large shields deformed harp, 6 —
Edge “octavo”.

238. — 1698. Hooked transverse harp, 7 strings.
Edge “nono”. BM., 8 strings.

239. — 1697. Vertical harp, 8 strings. Edge “nono”.

240. Shilling, 1696. Knobbed harp, 5 strings.

241. — 1697. Hooked transverse harp, 4 strings, small lions.

242. — 1697. — 6 — Large
lions. BM.

1. T. H. B. Graham ‘The Re-coinage of 1696-1697’, N.C., 1906.

243. — 1697. Hooked vertical harp. 7 strings, large lions. BM.

244. Sixpence. 1696. Deformed harp, 3 strings.

245. — 1697. Hooked transverse harp, 4 strings.

246. — 1697. Hooked vertical harp. 5 strings. BM., 4 strings.

247. Var. Arms of Ireland at the top.

IV. THE YORK ARCHIEPISCOPAL MINT.

(i.) *HISTORICAL.*

THE ANGLIAN KINGDOM OF NORTHUMBRIA.

ECGBERHT, 734—766.

The first Archbishop of York was Ecgbert, and there are silver coins bearing his name with A or AR for archbishop. Coins were struck by him during the reign of his brother Eotberht (who retired in 757), and also during the reigns of Ethelwald and Alchred.

Two gold coins—one in the Bateman Collection and the other in the possession of Mr. R. B. Cook—were found at York, the latter coin on November 20th, 1849. They bear, between two crosses, an oval enclosing a cross with latticed work below, whilst the reverse has a central cross surrounded by an inscription, of which no satisfactory rendering has been given.

Two uninscribed silver coins show a full face, and on the reverse an animal differing from those depicted on the coins of King Eadberht. These coins have been attributed to Ecgberht, and one, found at Carlisle, was sold for £16 5s. In York Museum is an uninscribed coin (79) bearing a three-quarter figure with crozier and 'animal' reverse.

Ecgberht's named coins are of three types: (i.) a mitred figure holding a crozier in each hand and alongside is the name 'Ecgberht,' whilst the reverse bears the King's name 'Eotberht' (77). (ii.) A mitred figure with crozier in one hand and pastoral staff in the other (78). A coin of this type has realised £14 10s.; and (iii.) which has a central cross surrounded by name and on the reverse a blundered rendering of the name of the King, Athelwald or Alchred.

The earliest coin of an Archbishop of Canterbury bears the name 'Jaenberht,' and on the reverse the name 'Offa,' King of Mercia, who conquered Kent in 774, so that the earliest 'Canterbury' coin is at least seventeen years later than that of York.

Three coins have been assigned by Lord Grantley as 'St. Cuthbert's pennies.'¹ struck either at York or Chester-le-Street. They are of the reigns of Alfwold I., Ethelred I. and II., ranging in date from 774—796.

There are no coins known of the succeeding Archbishops, Albert (Æthelbert) and Eanbald I.

¹ B.N.J., 1911.

EANBALD II. 796—808.

From the time of Eanbald II., the moneyer's name appears on the reverse of the coin (80). He issued silver and copper coins, on which his title is given variously as: AR, ARE, AREP. He had three moneyers, namely, Cunwulf, Eadwulf, and Edilveard.

No coins are known of Wulfsige.

VIGMUND. 837—854.

Vigmund issued gold, silver, and copper coins (81). The gold coin bears a full-faced bust, and resembles the gold solidus of Louis le Debonaire, and has the same reverse 'MUNUS DIVINUM.' His moneyers were: Coenred, Eardwulf, Edelhelm, Edilveard, Erwinne, Hunlaf, and Vulfrid. The title is usually AREP, IR, or IREP. The Y.P.S. possesses 559 copper stycas of this Archbishop.

WULFHERE. 834—901.

Wulfhere, under the Anglians, issued copper stycas (82). His moneyers were Eardulf and Wulfred. The inscriptions are retrograde. The Y.P.S. have 59 stycas.

THE VIKING KINGDOM OF YORK.

Archbishop Wulfere, who fled from York on its capture by the Danes is said to have not returned until seven years later. He may have been the means of converting to Christianity Guthred, King of York. Guthred on becoming a Christian appears to have adopted the name of Cnut.¹ The coins struck by Cnut bear on the obverse either a cross, a cross-crosslet, or a patriarchal cross, and on the reverse 'Ebraice Civitas.' The reverses of a number of silver pennies of Cnut and his successors Sievert and Alvard bear the inscriptions MIRABILIA FECIT (He hath done marvellous things), or DNS. DS. REX for Dominus Deus Rex, and these coins, it is very probable, were issued by the Archbishops during the Viking regime. A silver penny of Alvard bearing DNS. DS. REX. was found with a solid mass of copper stycas at York about 1860, and realised £61 at the "Rashleigh" sale.

ETHELBALD. 901—928.

A copper styca bearing EDELB AP was found at Hexham in 1832, but its present whereabouts is unknown.

In 921, Regnald, the Viking King of York, submitted to Edward the Elder. Edward asserted his authority by an issue of coins

¹ In the Cuerdale Find were 2534 coins bearing the name of CNVT.

from York. A coin (86) minted by Eadmund, a moneyer of Chester or Leicester, has a church shown on the reverse. The church has been described as "the lofty facade of a Saxon Minster and probably that of York." A similar device is on a coin by the moneyer Irfara (87). A coin minted by Ulfgar (88) shows a west end, with nave and side aisles. The Y.P.S. does not possess an example of these 'church' coins.

REDEWALD. 928—931. WULFSTAN. 931—956.

Two of Athelstan's moneyers, Regnald and Adelbert, set a building on the reverse. This edifice has also been referred to as that of York Minster.

The archiepiscopal "St. Peter" coins (83-84-85) have a connection with the coins of Kings Eric and Regnald. They comprise heavy and light silver pennies. The former are of five types, of which three depict swords, while one has the "Carolus monogram" on the reverse, and the other ^{SCIE} _{TRIV} with cross, and EBORAC on the reverse. One of the latter was found at the corner of Walmgate and Paver Lane in April, 1856.

One type of Regnald's coins bears on the obverse a representation of the hand from heaven.

Eadred conquered Northumbria in 914 and reduced it to an earldom.

YORK UNDER THE ANGLO-DANISH KINGS.

Archbishops—

966 Oskytel.	992 Adulph.	1060 Kinsius.
972 Ethelwald.	1002 Wulstan II.	1060 Aldred.
972 Oswald.	1023 Alfric.	

Rebellions and Danish incursions kept Northumbria in a state of turmoil, so that in 972 when Oswald, bishop of Worcester, became Archbishop of York, it was felt necessary for the maintenance of the northern primacy that the southern bishopric of Worcester should be united with York, and this continued until 1016. It is likely that minting by the Archbishops was maintained, for amongst the privileges which came to the first Norman Archbishop of York was that of two mints in York.

WILLIAM I. TO EDWARD I.

Archbishops—

1070 Thomas of Bayeux.	1154 Roger.
1101 Gerard,	1191 Geoffrey Plantagenet.
1108 Thomas II.	1216 Gray.
1114 Thurstan.	1256 Bovill.
1147 Murdac.	1258 Ludham.
1153 Fitz Herbert (St. William).	1279 Giffard.

A document c. 1080¹ recites the privileges of Thomas of Bayeux, the first Norman Archbishop of York, and amongst them are mentioned: "the bishop has two mints in York."

Thomas was succeeded by Gerard, whose right to hold a Court of Moneyers, for the trial and punishment of his moneyers, thieves or false coiners, or others committing offences in his own mint, was disputed by Odo, Sheriff of Yorkshire. The King confirmed the privileges of the Archbishop and the Church of St. Peter, of York. A penny showing Stephen's sceptre with an annulet top, and minted by Ulf, of York, is considered to have been issued by Archbishop Fitz Herbert (St. William of York) about the year 1140. The 'annulet,' as representing the Archbishop's ring, being considered a stamp of his mint.²

Walter de Gray obtained from Henry III. mandates to the Sheriff of Yorkshire and to the Mayor of York to cause the Archbishop to have fully and freely his money dies in York, in the same manner as his predecessors. His mint master was Hugh de Sampson.

EDWARD I. TO HENRY VIII.

Archbishops—

1279	Wickwaine.	<i>Henry IV., V., VI.</i>
1286	Romanus.	1407 Bowet.
1296	Newark.	1426 Kemp.
1300	Corbridge.	1452 Wm. Booth.
1304	Greenfield.	<i>Edward IV.</i>
		<i>Edward II.</i>
1317	Melton.	1464 Geo. Neville.
		<i>Edward III.</i>
1342	Zouche.	1476 Lawrence Booth.
1252	Thoresby.	1480 Rotherham.
1374	Alex Neville.	<i>Edward V., Richard III., Henry VII.</i>
		<i>Richard II.</i>
1388	FitzAlan.	1501 Savage, Thos.
1397	Waldby.	1508 Bainbridge, Christ.
1398	Scrope.	<i>Henry VIII.</i>
		Wolsey, Thos.
		1531 Lee, Edward.

William Wickwaine, Archbishop, was in 1279 required to show by what authority he claimed to have two dies in the King's city of York. He also alleged that all his predecessors used to have

the third die of all the dies which the King had in York. A jury decided in favour of the Archbishop.

In 1280, the keeper of the King's exchange was commanded to supply two dies for the archiepiscopal mint. On November 17th, 1281, an order was issued by the Archbishop to William de Malton to make things ready for our coining at York as he promised. November 19th, the Archbishop records: "we have made Mr. P. and Mr. G. Guydon masters of our mint." In 1300, two dies were issued to Archbishop Corbridge. His register records: December 17th, 1301, Edward de Clement gives to the treasurer and chancellor two piles and three ordinary trussels for the archiepiscopal mint. The Archbishop's moneyers were Pontius de Conivers and Simon de Senis.¹

Archbishop Melton's Register records Richard de Snoweshill as mint master. 1331, August 7th: An order to John of Nottingham, the Archbishop's receiver at York to give to Mr. Richard, the goldsmith of Grimesby, whom we have appointed our *magister cuneorum*, all our silver plate in your keeping. August 8th: Richard Snoweshill is appointed *custos cambri*, and on the same day, Nottingham, the receiver, is directed to give him 200 lbs. of silver to hand over to Richard, the goldsmith, to coin into money. Aug. 20th: To Richard of Snoweshill and Richard de Grimeston of York, goldsmith, 100 lbs. of silver plate. On the 28th, the receiver is to pay Snoweshill £100 for the use of the mint, and on August 31st the same officer is ordered to place in his hands the Archbishop's silver plate. December 28th: To R. de Snoweshill, our receiver at York, the money he has spent "circa missionem cuneorum nostrorum apud London et pro ipsis cuneis ibidem fabricandis" and for bringing them to York. March 13th, 1333-4, acq. of the accompt of Snoweshill as keeper of the mint, 3110 lib. arg. 4s. 11d. remaining in his hands. The accounts run from August 8th, 1331, to Michaelmas, 1333, and are passed. January 12th, 1337-8: An order to the receiver at York to buy silver plate for our use. 1335, February 19th: Release of the accompt of Richard de Snoweshill, our receiver at York. He has in hand belonging to us £1712 14s. 6d., thirty-six "florinos regales," forty-nine "de agno," and forty-six "de Florentia," with a silver cup gilt and enamelled, an ewer gilt and enamelled, pledged by Sir John Cromwell for 20 marks; and two "impele" pledged by Sir Fulk

¹ Raine, "Fasti Eboracenses," p. 357.

Fitzwarren for £20. 1336, December 11th: We have received from our receiver at York £842 11s 10d, of our new money.

Richard de Snoweshill was Melton's mint master and his receiver. He became rector of Huntington, near York. He made his will 27th August, 1349, desiring to be buried near the vestry wall in the choir of All Saints Church, Huntington, if he die in the diocese of York. He gives a legend to the church, and leaves 10s. to buy a stone coffin in which his body is to be laid. Pro. 7th August, 1349.¹ (Reg. Zouche).

The Register of Archbishop Zouche records: 1345, January 21st, to Robert de Askeby and John de Sutton, clerk, our domestic chaplains, their expenses whilst absent on the business of our mint.

The King, on May 2nd, 1353, allowed Archbishop Thoresby "duos cuneos monetales" at York. The Archbishop's Register records: 1357, February 18th, Indenture between the Archbishop and Laurence of Florence, about the making of sterlings in the palace at York. 1365, March 14th: Lease of the Archbishop's mint, for two years, to Andrew de Florencia, at a rent of 20 marks per annum.²

Edward III. issued a mandate to Archbishop Alex. Neville to have "duos cuneos monetales pro cambio suo Eborum." The mandate was confirmed by Richard II., who also granted Richard Scroope, on his becoming Archbishop, the rights of his predecessors, which included the two money dies for his exchange at York.

In a compotus of the temporalities of the See of York during a vacancy which occurred in the 47th Edward III., the *firma cunei monete infra palacium* for one year was returned at one hundred shillings; and in the same account the collector claimed 6s. 8d. for his fee as *examinator monete infra palacium*.

The Archiepiscopal coins are only distinguished from the Regal ones by mint marks. Those of York from Edward I. to Henry VI. cannot be as readily identified as those minted at Durham. The coins of the Prince-bishops of Durham are thus recognised: a cross moline for Bek, one limb of the cross formed into a crozier for Kellow, a lion rampant for Beaumont, a mullet for Langley, and interlaced rings for Neville.

The open quatrefoil in the centre of the cross on York coin reverses is considered to be the mark of the Archiepiscopal mint,

¹ Raine, F. E., p. 430.

² Raine, F. E., p. 462.

the open quatrefoil with limb of cross forming the key of S. Peter.¹ During the reign of Richard II. the coins bore the 'open quatrefoil' with other mint marks, such as an escalllop after CIVITAS. The earlier and finer coins are assigned to Archbishop Neville, and the later and inferior issues to Archbishops Arundel, Waldby, and Scrope. The coins of Bowet, Archbishop during the reign of Henry V. may be those bearing a quatrefoil to the left and an annulet to the right and EBORAC instead of EBORACI.

During the vacancy of Archbishop Bowet, John Esyngwold, of York, was entrusted with the coinage.

From the reign of Henry VI. the Archiepiscopal coins can be identified with certainty for initials were placed on them. A farthing of John Kemp, who was Chancellor of the Exchequer when appointed to York, bears the King's head between the letters C.I (Cancellarius Johannes); a similar farthing² has a key under the King's head, but no initials. Pennies of George Neville have the letter G and a key on Edward IV.'s coins, those of Lawrence Booth have B and key, and Thomas Rotherham's are known by the letter T and a key on the coinage of three Kings, namely, Edward IV., Richard III., and Henry VII.

On June 28th, 2nd Henry VII., Thomas Gray, master of the mint within the palace garth of the city of York delivered unto William Todd, Mayor of city of York, a leather bag containing 12 old coining irons, that is to say, 4 standers and 8 trussels. The Mayor sealed the bag and delivered it to John White, coiner, to deliver unto the exchequer at London, and from there to bring new graven irons unto the city of York.

On July 19th, Thomas Cray, goldsmith, master of the mint at the palace of the Most Reverend Father in God, the Archbishop of York, appeared before the Mayor of the city of York in the chamber upon Ouse brig and presented unto him a sealed leather bag, which contained 4 standards and 8 trussels bearing the penny coin, sent unto him from the King's exchequer. The Mayor delivered unto Gray the said 4 standards and 8 trussels, but reserved the bag unto himself as there was a hole in its side by which the said irons were taken out.

Thomas Gray, the Archbishop's mint master, was Sheriff of York in 1488, M.P., in 1495, and Lord Mayor in 1497.

Archbishop Savage coined half groats as well as pennies, his coins being recognised by the key on each side of the bust of

¹ B.N.J., vol. vi.

² Ruding Supp. pl. 3, ii.

Henry VII., or below the shield on the reverse (90). Christopher Bainbridge issued coins with X and B at the sides of the shield, and with a martlet as mint mark. He was created Cardinal in 1511, after which his coins bear two keys under the shield and a Cardinal's hat, the earlier issues are without his initials, and the later ones bear X. B.

CARDINAL WOLSEY. 1514—1531.

On May 21st, 1523, Cardinal Wolsey in an Indenture¹ with William Wright, alderman of York, appointed him master and worker of his monies of silver in his mint at York. Wright was to receive the Cardinal's irons, and to have as many smiths, workmen, and labourers as necessary, and to coin half groats and halfpennies, and he was to pay the Cardinal yearly £5 for the privilege of holding the office of mint master. William Wright, the mint master, was Sheriff of York in 1511, and Lord Mayor in 1518 and 1535.

Cardinal Wolsey put on his coins his initials T. W. at the sides of the shield in addition to the two keys and the Cardinal's hat below the shield. Later the keys disappear from the coins (91). Wolsey issued groats, half groats, pennies, and halfpennies. The issue of groats got Wolsey into trouble, for it formed one of the charges against him on his impeachment in Parliament, namely, that of "his pompous and presumptuous mind, he had enterprised to join and imprint the Cardinal's hat under the King's arms on the King's coin of groats made at the city of York, which like deed had not been seen to have been done by any subject within the realm before this time."

EDWARD LEE. 1531—1544.

Edward Lee was the last of the Archbishops of York to exercise the right of coining. He issued half groats, pennies, and halfpennies, which bear a key on the obverse, with the head of Henry VIII. and E and L at the sides of the shield on the reverse.

¹ Cæsar Caine, "Archiepiscopal Coins of York," p. 59.

(b) COINS.

The Anglian Kingdom of Northumbira.

ECGBERHT, Archbishop of York, 735 to 766.

Silver Sceattas.

1. *O. ECGBERhT A.*

+

R. EOTBEREhTVF.

Figure, holding two croziers. YM. J. Browne. (77). BM., 2, 2.

2. *O. ELGBERhT AR.*

+

R. OTBEREVhTERF.

Figure holding crozier and pastoral staff. Y.M., Mount 1888, (78), 2. CB., 1 sold for £ 14 $\frac{1}{2}$.

+

3. *O. EGBERhT AR.*

R. + A-DBALDIV (Athelwaldus-King).

One in 1832 was in the possession of Mr Clarkson of Richmond, another was in the Rashleigh collection.

+

4. *O. ECGBERhT AR.*

R. + ALYHRDM (Alchred C.) both C's runes.

+

5. *O. + EBREhT A.*

+

R. +AL-I-HRD M.

Both in Lord Grantley's Collection. N. C., 1897, pl. VII, 1, 2.

Unknown (unnamed).

6. Gold. *O.* Cross in oval between two crosses and below latticed work.

+

R. DAOCIwNF.

Two coins, one found in York, Nov. 20 1849 R. B. Cook, the other was in the Bateman Collection. Illus. B. A. J., Vol, 2, p. 190.

7. Silver. *O.* Full face, four pellets each side.
R. Animal with head turned to the right, and having a curved line between the legs.
Two. One found at Carlisle. CB., 175, pl. VI, £ 16 $\frac{1}{4}$.

EANBALD II, Archbishop, 769-808.

Moneyers : — Cunvulf, Eadvulf and Edilveard.

8. Silver. *O.* + **EVNB^WLDV.**

R. + **EDILV^WRD.** CB., £ 6 $\frac{1}{4}$.

9. Copper. *O.* + **EANBALD AR.**

R. + **EODVVLF.** YM. (80).
BM., 40 (pl. XXIII, 234-5) various titles **AREP·ΛEP·ARE·AR·AB·ARC.** YM., 5 coins.

VIGMUND, Abp., 835-854.

Moneyers : — Coenred, Eardvalf, Edelhelm, Edilveard, Erwinne, Hunlaf and Vulfred.

10. Gold, *O.* Tonsured bust facing **VIGMVND ARE.**

P

R. **MVNVS DIVINVM.** BM., pl. XXIII, 6.

11. Silver. *O.* + **VIGMVND IREP.**

R. + **COENRED.** CB.. Two £ 1 $\frac{3}{4}$.

12. Copper. *O.* + **VIGMVND IREP.**

R. + **COENRED.** YM., (81).
BM., 80 (pl. XXIII, 7, 8, 9, 10). YM., 551. Davies, 8.

WULFHERE, Archbishop, 854 to 901.

Moneyers : Eardulf and Wulfred.

13. Silver (base). *O.* **VVIFHERE PEP** (retro).

R. + **VVLFRED** (retro). CB., £ 2.



14. Copper. *O. AΛΙΦΗΕΡΕ ƿEP.*



R. ƿVVLFRE. YM. (82).

CB. £. 3.3.0. A coin. *R. + EARDEVVE* (ret.) £ $2\frac{3}{4}$.

BM., pl., XXIII, 11-12. Both names retrograde. Y. M.. 53.
Davies Coll. 6.

The Viking Kingdom of York.

Wulfere, according to Symeon, was archbishop for 47 years, his death therefore would have occurred in 901. It is probable that the following series of coins were issued by Wulfere during the reigns of the Viking Kings of York namely Cnut, Siefred and Alvalds.

15. *O. + CNVT REX.*

R. A + MIRABILA FECIT. BM., 4 (pl. XXIV, 13).

16. *O. CVT REX B.*



R. + DNS·DS·RE. BM., 1, pl. XXIV, 14.

17. *O. * + SIEUERT REX.*



R. + MIRABILA FECIT. BM. 1 pl., XXVII, 1.

Halfpenny.

18. *O. + SI·:FCR·:TRE.*



R. + NI·:RĀ·:BI·:LI·: BM., 1 pl., XXVII, 2.

Penny.

19. *O. + SIEUERT REX.*



R. + DNS·:DS·:R·EX·: BM., 8 (pl. XXVII, 3).

Halfpenny (half-coin).

20. *O. IEUERT.*



R. DS REX. BM., 1, pl. XXVII, 4.

CNUT or SIEFRED. Pennies.

21. *O. + E·BR·AI·CEC* (York).



R. + MIRABILA FC. BM., 11 (pl. XXVII, 5, 6, 7, 8). CB.,
two £ $6\frac{1}{2}$.

*

22. *O.* + ·EBR·AI·CE·C.

+

R. + D·NS·DS REX. BM., 2 (pl. XXVII, 9).

+

23. *O.* + MIRABILIA FECIT.

DNS DS

R. + · BM., 11 (pl. XXVII, 10, 11, 12). CB., one £ 6 $\frac{1}{4}$.
♦ REX

Halfpenny.

+

24. *O.* + II·ID·AFI·CIT.

DNSD

R. + BM. 1, pl. XXVII, 13. CB., one £ 5.
♦ REX

Penny.

+

25. *O.* + AL·VVAL·DV.

DNS DS

R. + BM., 1, pl. XXVIII, 2. CB., a coin -260- was sold
REX
for £ 76.

ETHELBALD, Archbishop, 901 to 928.

26. *O.* E·DELB AP.

R. × EANREI.

This styca¹ was found at Hexham in 1832 but its present whereabouts is unknown.

Unknown.

27. *O.* + + +
II EIL
I EP

+

R. RCI·V·I CAI (retro).

PE I

28. *O.* + + +

D EP

R. PEIΛI·VI (retro) or DEIVI·AI.

The above two coins were found with several of St Peters type (light weight) and of Edward the Elder at Chester, they were attributed by Rashleigh to Neil, an under King of York, but Kenyon considers they may bear the name of some bishop. The type resembles Erics and Onlafs.

1. Major Creeke.

REDEWALD, 928 to 931.

WULFSTAN, 931 to 956.

The 'S' Peter coins' have a connection with the coins of Kings Eric and Regnald II, and appear to have been issued by the archbishops Redewald and Wulfstan.

A. Heavy coins, 5 types.

29. Type 1. *O.* (sword to r.)

SCI PE

TR \ddagger MO

 R. + EB \ddagger R \cap A \cup CE II. BM., 5 (pl. XXX, 1). CB., 266, £ 10.

30. Type 2. *O.* (sword to r.).

SCI P

TD III

▽

 R. + ERI \ddagger ITM.

O. (sword to r.)

SCIIR

TIIIO



R. + ERIVITID. YM. (84). BM., 3 (pl., XXX, 2-3). CB., 267, var., £ 7, 17, 6.

31. Type 3. (sword to l.)

SCI \ddagger :

TIIIO



R. + LBIOEVITR. BM., 1 (pl. XXX, 4).

32. Type 4. *O.* SCI IE

TRN

R
K \ddagger S

R.

L

+ ER \ddagger RICE CT

YM., (83).

BM., 1 (pl., XXX, 5)

SCI \ddagger +
< · > EBORACI.
TRN

33. Type 5. *O.* SCI PE
+
TRI MO
+

R. EB + RACE CIV.  device on two obverses. BM., 18

(pl. XXX, 6, 7, 8).

34. A coin found Ap. 1856 at the corner of Walmgate and Paver Lane bore: —

O. SC IE
TB IT
@@

R. + EBORAC

B. Light Coins.

35. Type 5. B. Light Coins.

BM., 24 (pl. XXX, 9). CB., -268- £ 5 $\frac{1}{2}$.

Halfpenny.

∴

O. SC III

TRIM

+

+

R. + EDORACE CI. BM., 1 (pl., XXX, 10).

One type of Regnald II (Y.M., 85) coins bears on the obverse the hand from heaven.

Some of the 'St Eadmund's' (East Anglia) silver pennies coins were apparently struck at York.



36. *O.* + SOC EADIIVN.

+

R. + ERIACE CIV. BM., 2 (pl., XIX, 6).

EDWARD THE ELDER, 901-925.

+

37. Type XII. *O.* + EADVVEARD REX.

R. EA DV BM., 2, pl. VIII, 13 (86).
H ND
(building)

CB., -372-. VN D+ £ 26.

EA D+

38. *O.* + EADVVEARD·REX.

R. IR FA BM., 2, pl. VIII, 14 (87).
RA MO
(building)

39. Type XII. *O. + EADVEARD REX.*

R. VVLFGAR. BM., 2 pl. VIII, 15 (88).

AETHELSTAN, 925-941.

40. Type IV. *O. + AEDEL-STAN REX.:*

R. EB OR BM., 2. pl. IX, 2. Ruding, 1 coin-, Boyne,
AC AC¹ 1 coin.

REGNAND

∴ MON ∴

+

41. *O. + AEDELSTAN RX.*

R. MO N

ADELBERT

∴

C. B., 377. "View of the Saxon York Minster" £ 15 $\frac{3}{4}$, pl. XI.
BM., 2, pl. X, 9 with Frotier (Frotger, Shrewsbury) as moneyer.
Anglo-Danish Period.

Archbishops.

956 Oskytel

992 Adulph

1023 Alfric

972 Ethelwold

1002 Wulfstan II

1050 Kinsius.

WILLIAM I to EDWARD I.

Archbishops

1060 Aldred

1070 Thomas of Bayeux

1154 Roger.

1101 Gerard

1191 Geoffrey Plantagenet.

1108 Thomas II

1216 Walter de Grey.

1114 Thurstan

1256 Sewell de Bovill.

1147 Henry Murdac

1258 Geoffrey de Ludham.

1153 William Fitz Herbert

1265 Walter Giffard.

William Fitz Herbert (S. William) c. 1140-1.

Var. H., 270. Stephen's sceptre has an 'annulet' top. The 'annulet' is a stamp of the archbishop's mint, applicable to the church of St Peter as representing the archbishop's ring.

42. *O. + STIEFNE:*

R. + VLF : ON : EVERPIC. B. N. J. Vol. VII.

FROM EDWARD I to HENRY VIII.

For henceforth, the moneyer's names are absent from the coins.
The name of the place of mintage is however given more pro-

1. Ruding, p. 234, 2nd Ed. AC may be for ACCLESIA (ECCLESIA).

minently and there are various marks. The coins of the archiepiscopal mint are distinguished from the regal coins by having an open quatrefoil on the reverse. This mark was retained until the time of Henry VII.

It has been suggested that the quatrefoil with one limb of the cross may represent the Key of St. Peter.

EDWARD I, 1272-1307.

Archbishops.	Mint Master.
1279. William of Wickwaine.	P. and G. Guydon.
1286. John Romanus.	
1296. Henry Newark.	
1300. Thomas Corbridge. Pontius de Conwers, Simon de Senes.	
1304. William Greenfield.	

43. *O. + EDWR'ANGL DNS bVB.*

R. CIVI TAS EBO RACI. A quatrefoil in centre of the reverse.

44. Penny. Group III var. *g* 1281. A quatrefoil in centre of the reverse.

45. Penny. A quatrefoil on the King's breast, and also in the centre of reverse.

46. Penny. A quatrefoil in centre of reverse. N in one case thus *[N]*.

47. Penny. Group IX B 1300 no star. A quatrefoil in centre of reverse.

EDWARD II, 1307-1327.

Archbishop.	Mint Master.
1317. William Melton.	Richard de Snoweshulle.
48. Penny. <i>O. + EDWAR R ANGL DNS bVB.</i>	
<i>R. CIVI TAS EBO RACI.</i>	Quatrefoil in centre of cross.

EDWARD III, 1327-1377.

Archbishops.	Mint Master.
1342. William Zouche.	
1352. John Thoresby.	Lawrence de Florence.
1374. Alex. Neville..	
49. Penny ante 1351. <i>O. + EDWAR ANGL DNS bVB.</i>	
<i>R. CIVI TAS EBO RACI.</i>	Quatrefoil in centre of cross.

50. Penny after 1351. *O. + EDWARDVS REX ANGLI.*
R. CIVITAS EBO RACI. Quatrefoil in centre of cross (89).
Quatrefoil enclosing pellet. Balcombe Find 5.

RICHARD II, 1377-1399.

Archbishops.

1388. Thomas Fitz Alan of Arundel. 1397 Robert Waldly. 1398
Richard Scrope.

51. Penny. *O. + RICHARDVS × REX × ANGLIE.* Cross on
breast.

R. CIVITAS(1) EBO RACI. Quatrefoil enclosing pellet in
centre of cross.

HENRY IV, 1399-1413.

Archbishop 1407 Henry Bowet.

52. *O. + HENRIQ REX ANGL Z FRANC.*

R. CIVITAS EBO RACI. Quatrefoil in centre of cross.

HENRY V, 1413-1422.

53. *O. HENRIQ × REX × ANGL Z FRANC.* Mm. cross with
circular sinking.

R. CIVITAS EBO RACI. Quatrefoil enclosing pellet in centre
of cross, pellets in angles united.

54. Trefoil issue. *O. HENRIQ × REX × ANGLIE* $\frac{x}{x}$ F. Mm.
pierced cross.

R. CIVITAS EBO RACI. Quatrefoil with pellet in centre.

55. 4th Type. *O. HENRIQVS × REX × ANGLIE.* Mm. cross
pierced.

R. CIVITAS × EBO RACI. Quatrefoil and pellet in centre.

56. Annulet Coinage. *O. HENRIQVS × REX × ANGLIE.* Mm.
pierced cross.

R. CIVITAS ° EBO RACI. Quatrefoil in centre of cross.

FA. Walters N.C. 1906.

HENRY VI, 1422-1461 restored 1470-1471.

Archbishops 1426 John Kemp. 1452 William Booth. 1464 George
Neville.

57. *O. HENRIQVS REX(1) ANGLIE* (1) mascle.

R. CIVITAS EBO RACI. Quatrefoil enclosing pellet.

EDWARD IV, 1461-1483.

Archbishops 1476 Lawrence Booth. 1480 Thomas Rotherham.

JOHN KEMP, Archbishop.

Henry VI. Farthing, 1425-1453.

58. *O. b D G A R Z F R A . . I E R E X.* Mm. a cross. Initials **C** and **I**.

R. CIVITAS EBORACI.

The letters **CI** are considered to refer to Cancellarius Johannes (Kemp).

59. A similar farthing has a Key under the King's bust but no initials.

60. Penny 'heavy'. *O. E D W A R D D I C R A R E X A N G L.* Mm. a rose.

R. CIVITAS EBO R A C I. Open quatrefoil in centre.

Pennies.

GEORGE NEVILLE, 1464-1476.

Henry VI Restoration 1470-1471. York was the only ecclesiastical mint for this brief period Archbishop Neville was Chancellor.

61. Penny. *O. H E N R I C U S D I C R A R E X A N G L.* Key to right **G** to left of bust. Mm. lys.

R. CIVITAS E B O R A C I. Quatrefoil in centre of cross. NC. 1910. Montagu Collect. 1 same except **H E N R I C**. Guisborough Find 3. Edward IV.

62. *O. E D W A R D D I C R A R E X A N G L.* Key on l, **G** on right of bust. Mm. a rose.

R. CIVITAS E B O R A C I. Quatrefoil in centre of cross. Guisborough find 33 with **G** and Key.

LAWRENCE BOOTH, 1476-1480.

63. Similar to 62 but with **B** on one side of the King's breast and a Key on the other.

THOMAS ROTHERHAM, 1480-1501.

64. Similar to 62 but with **T** on the left and a Key on the right of the bust.

Richard III, 1483-1485.

65. *O. R I C A R D D I C R A R E X A N G L.* Mm. a boars head. **T** and Key at the sides of the King's neck.

R. CIVITAS EBORACI Long cross. Quatrefoil in centre. Varieties have a rose and sun united, and the usual Tand Key. Henry VII, 1485-1509.

Archbishops. 1501. Thomas Savage 1508. Christopher Bainbridge.

66. *O. HENRICI DI CTRA REX ANG.* Mm. a rose **T** on each side of bust.

R. CIVITAS EBORACI. Cross with quatrefoil in centre.

Varieties have **T** and a Key, or **T** and a lis or **T** and a trefoil at each side of the bust. Others have the letter **h** in the centre of the cross on the reverse.

THOMAS SAVAGE, 1501-1508.

67. Half Groat. *O. HENRICI DI CTRA REX AGL Z F.* Mm. a martlet.

R. POSVI DEV ADIVTORC WEV CIVITAS EBORACI.

68. Half Groat. *O. HENRIC VII DI CTRA REX A.* Mm. a martlet.

R. POSVI DEV ADIVTORC WEV. Cross and shield. Two Keys under the shield (90).

69. Penny 1485. *O. HENRICI DI CTRA REX ANG.* King enthroned.

R. CIVITAS EBORACI. Two Keys under the shield.

70. Halfpenny 1489. *O. HENRICI DI CTRA REX A.* Key under bust.

R. CIVITAS EBORACI.

CHRISTOPHER BAINBRIDGE, 1508-1514.

Henry VIII 1509-1547. Archbishops. 1514. Thomas Wolsey. 1531. Edward Lee.

71. Half Groat. *O. HENRIC VIII DI CTRA REX AGL.* Mm. a martlet.

R. POSVI WEV ADIVTORC WEV. Shield between **X** and **B**.

72. *O. As 71 except AGL Z.* Mm. a cinquefoil.

R. CIVITAS EBORACI. Two Keys under the shield, and a cardinal's hat below.

YM. a specimen.

THOMAS WOLSEY. 1514-1531.

73. Half Groats 1509. *O. As 71 except AGL* (stops saltires). Mm. a cross.

R. As 72 (stops saltires). Mm. a cross shield between **T·W**, and below, two Keys and a cardinal's hat. BM.

74. Half Groat. *O. hENRIQ VIII D C R A C L Z FR.* Mm. a cross voided.

R. As 72.

75. Pennies. Two Keys.

76. Halfpenny. Key under bust.

1526 Coinage Groats.

77. *O. hENRIC VIII D GR A C L Z FRANC* (stops saltires). Mm. a cross.

R. CIVITAS EBOPACI (stops saltires). A shield between **T W**, R a cardinal's hat below.

A Variety has **FRA** on obverse, and others have an acorn.

78. Half Groats. *O. hENRIC VIII DI C RA REX A C L.* Mm. a lis.

R. CIVITAS EBORACI. Shield between **T** and **W**, a cardinal's hat between two Keys below.

79. Half Groat. *O. hENRIC D C R A C L Z R.* Mm. a cross.

R. CIVITAS EBORACI. Shield between **T** and **W**, a cardinal's hat below (91).

EDWARD LEE, 1531-1544.

Henry VIII 2nd coinage Half Groats.

80. *O. hENRIQ VIII D C R A C L Z FR.* Mm. a Key.

R. CIVITAS EBORACI. Shield between **E** and **L**.

A variety has **L·E**.

Penny. Henry VIII. Second Coinage.

81. *O. hENRIC VIII D C R A C L Z FR.*

R. CIVITAS EBORACI. Shield between **E** and **L**.

82. Halfpenny. *O. hD C ROSA SIE SPIA.* Bust between **E** and **L**. Mm. a Key.

R. CIVITAS EBORACI.

With this issue of coinage the Episcopal Mints of Canterbury, Durham and York came to an end.

V. YORK TRADESMEN'S HALFPENNIES
AND FARTHINGS, YORK TOKENS AND MEDALS.

(i.) *HISTORICAL.*

Owing to the want of small change and to the abeyance of the Kingship, traders assumed the royal prerogative of coining and issued halfpennies and farthings made of copper or brass (68-69-70). From 1665 to 1670 seventy different York tradesmen issued these private tokens, of which Drake (1736) illustrates fifty. A music master's halfpenny exhibits a figure of Punchinello. The Government of Charles was induced to issue a national copper coinage; farthings were put in circulation in 1672, and tokens were at the same time suppressed.

Again, during the reign of George III. the copper coinage was deficient and tradesmen's tokens once more made their appearance. In 1796, James Carlisle issued two York halfpennies (75 and 76) designed by Wyon, of each of which two hundred impressions were struck. Five hundredweights were struck of a York halfpenny (71) sculptured by Dixon. A fine medal was published in 1796 by Cattle, Harrison and Cattle, of similar design, but of superior workmanship, by Thomas Wyon.¹

Of three "Minster" medals, two are mementos of the fire in 1829, and one of the Great Bell.

A medal of the York School of Medicine was issued in 1834. Another commemorates the visit to York of the Duke and Duchess of York in 1890, whilst the latest medal commemorates the Pageant of 1909.

(ii.) *TRADESMEN'S HALFPENNIES & FARTHINGS,
TOKENS, MEDALS.*

1 THO. ALLOTT. IN. THVRSDAY *A griffin.*

MARKEYT. IN. YORKE—HIS HALF PENY. 1666.

2 HENERY. ARMISTEAD. OF. THE *The Skinners' Arms.*

CITTY. OF. YORKE. SKINNER HIS HALFPENY. 1666.

3 WILLIAM BARRON HIS HALFPENY.

IN YORKE. 1671. A...between 3 garbs. *The Grocers' Arms.*

¹ Boyne.

4 WILLIAM BELL GROCER—1665.
OF YORK HIS HALF PENY—W.B.

5 ROBERT BENSON—HIS HALF PENY
IN. YORKE. 1667. *The Mercers' Arms between R B I*

6 CHARLES BLANSHARD AT THE *A boy seated on a Barrel.* (Jolly
IN. YORKE. HIS. HALF PENY—1666. Bacchus.)

7 RICH. BOOTH AT THE GOLDEN *Fleece.*
IN. THE. CITTY. OF YORK R B M ½d.

8 RICH. BOOTH. AT. THE. GOLDEN *A Fleece* (suspended)
FLEECE. IN. YE. CITTY. OF. YORKE HIS $\frac{1}{2}$ B.R.M.

9 ALLICE. BOVLTON *A Tower.*
OF YORKE 1671—HER HALF PENY

10 ABRAHAM BOYES—HIS $\frac{1}{2}$
OF. YORKE. 1670 *Three tobacco pipes form a triangle.*

11 THOMAS BROWNE OF YORKE *The City Arms.*
GROCER HIS HALFPENY *The Grocers' Arms.*

12 THE. CASTEL. TAVERN *A Tower.* ½d.
AT. THE. POSTORN. GATE. W.M.

13 IAMES. CAVTON. MARRINE. *An Anchor.*
IN. YORKE. 1667—HIS HALFE PENY I C M•

14 IOHN. CAVTON. FISHMONGER *The Fishmongers' Arms.*
IN. YORKE. 1667 HIS HALFE PENNY I.E.C.

15 THOMAS. CAVERLEY *The Merchant Taylors' Arms.* ½d.
IN. BOOTHAM. 1666 T.C.

16 THO. CORNWEL. GROCER *The Grocers' Arms.*
IN. MIDLEGATE. YORKE T C E ½d.

17 WILLIAM. COWPLAND *A lion rampant.*
IN. YORKE. 1667—HIS HALF PENY

18 Thomas Cundell of Yorke his $\frac{1}{2}$ d.
A swan with wings expanded.

19 Charles farnehill of Yorke his $\frac{1}{2}$
Implements for bleeding and a hand holding a cup. 1661.

20 WILLIAM FEATHER HIS HALFPENY
IN YORKE 1666

21 ROBERT. GARDNER. OF. YE *A Swan.*
CITTY. OF. YORKE 1667—HIS HALFE PENY (68).

22 WILL. GARNETT. HIS. HALF PENY *A bull's head.*
GIRDLER. OF. YORK 1670 *The Girdlers' Arms.*

23 FRANCIS. HALL. OF. YORKE—HIS HALF PENY F.H.
SILK. WEAVER 1666 *The Weavers' Arms* (69).

24 *John Hoopes of Yorke his $\frac{1}{2}$* (in four lines).
A tree with three crowns amongst the branches 1668.

25 MATHEW . HOTHAM . DRAPER . IN . YORKE (in five lines).
The Drapers' Arms. $\frac{1}{4}$ d.

26 ROBERT . HUNTER . OF .—HIS HALFE PENY
YORKE . 1 . 6 . 7 . 0 Shield a chevron between three stringed
horns.

27 THOMAS . HVRST . PINER . IN *The Mercers' Arms.*
YORKE . HIS . HALF . PENY . 66 T.H.

28 THOMAS . HVRST : PINER *The Mercers' Arms.*
IN . YORKE . 1666 T.H. $\frac{1}{4}$ d.

29 GEORGE . HVTCHINSON--HIS HALFE PENY
OF . YORKE 1 . 6 . 6 . 9 *A bunch of grapes.*

30 IOHN . HVTCHENSON . *The Mercers' Arms.*¹
OVS . BRIDG . PENY . IN . YORKE. I H A

31 IOHN . HVTCHENSON 1666 *The Mercers' Arms.*
IN . YORKE . HIS . HALF . PENY . I H A

32 RICHARD . HVTCHINSON

33 WILL : INMAN . GROCER IN—1666
YORKE . HIS . HALFE . PENNY W.I.

34 GEORGE JACKSON *St. George and the Dragon.*
GROCER IN YORKE G I $\frac{1}{4}$ d.

35 CHARLES . IENKINSON C I A
THE . CITY . OF . YORKE . *The City Arms.* $\frac{1}{4}$ d.

36 IOHN . KETTLEWELL . OF . YORKE . *A vase of flowers.*
GLASSMAN . HIS . HALF . PENY.—1666

37 George Kichley Yorke his $\frac{1}{2}$ (in four lines).
A Pegasus 1668

38 Richard Lambert of Yorke his $\frac{1}{2}$ (in four lines).
A crown 1688

39 IAMES . LEECH—HIS HALF PENY
OF . YORKE 1666 *The Skinners' Arms.*

40 EDWARD . LEGG . HIS HALFE PENNY (in four lines).
IN . YORKE . 1669 . *A leg, booted and spurred.*

41 IOHN . LEGG . BACER . OF . YORKE—HIS HALFE PENY 1667
WITHOVT . BOTHAM . BARR . . . *The Bakers' Arms.* (scales)

42 THOMAS . LEGG . PINNER—HIS HALF PENY
IN . YORKE . 1665 T L A

43 IONAS . MASCALL . OF . YORKE . *A man smoking and seated on a bale.*
IN . STONE . GATE . GROCER . M.M. $\frac{1}{4}$ d.

¹ Bowman.

44 WILLIAM . MANCKLINS . 66 . *The Skinners' Arms.*
ARTIZAN . SKINER . OF . YORKE—HIS HALFE PENNY

45 IOHN . MOOER *A ship.*
IN . YORKE 1666 HIS HALF PENY

46 WILL . MOORE . IN . STONEGATE . TRVNKMAKER : HIS HALF PENY
YORKE, *between four tobacco pipes.* (in seven lines).

47 CHRISTOPHER . MORLEY . OF *The Rose and Crown.*
OVS . BRIDG . BARBER . IN . YORKE C M A 1666 $\frac{1}{4}$ d.

48 IOHN . ORTON . GIRDLER . *The Girdlers' Arms.*
IN . YORKE . 1666—HIS HALFE PENNY

49 FRAN . RAY . HIS . HALFE . PENY. *A globe.*
YE GLOBE . IN . YORKE—1666

50 IOHN . RAYSIN . IOYNER . IN Shield—a cross.
YORKE . HIS—HALFE . PENY 1666 I R P

51 IOHN . ROOME . OF . YORKE . 68 *The Tallow Chandlers' Arms.*
CHANDLER . HIR . HALFE . PENY I.R.

52 WILLIAM RIPLEY

53 PHILLIP . ROSENDALL *Three figures inspecting a globe.*
IN . WATER . LANE . YORK.—HIS HALF PENY

54 ROWLAND RICHESON $\frac{1}{4}$ d.
PINNER . IN . YORKE . 1668

55 PEETER RICHARDSON—HIS HALF PENY.
MILLENER . IN . YORKE . P.R.

56 WILLIAM RICHARDSON

57 Samuell Saire of Yorke his $\frac{1}{2}$ (in four lines).
1668 Shield 3 birds two and one.

58 IOHN . SHARP . IN . YE . CITTY . *A lion rampant.*
OF . YORK . HIS . HALF . PENY . *A swan* 1669 (70)

59 CHRISTOP : SIMPSON . C S . E
BEARE . BRWER . IN . YORKE—HIS HALFE PENNY

60 ELIZ : SMITH . PINNER . *An embattled bridge of five arches.*
OOSE . BRIDG . IN . YORKE.—HIS HALF PENY

61 GEORGE . STOCKTON . 1666—HIS HALFE PENY
SILKWEAVER . IN . YORKE G S M

62 WILLIAM TVRNBVLL OF YORK *A shield bearing a chevron between 3 bull's heads. The Vintners' Arms.*
VINTNER . HIS . HALF . PENY *A mitre.*

63 Thomas Wallker Dier in Yorke his $\frac{1}{2}$ (in five lines).
1669. *The Dyers' Arms.*

64 John . Waller . in . Yorke . Girdler $\frac{1}{2}$ (in four lines)
A large flower 1669

65 ROBERT . WASSE .

66 DENNIS . WATERHOVSE . *Three figures inspecting a globe.*

MARRINER . IN . YORKE . 1667—HIS HALFE PENY D W E

67 ROGER . WILBERFOSS 1666. *A man's hat, underneath R.W.*

IN . LOEOVSGATE . IN . YORKE . HIS HALF PENY

68 MARY . WIND . AT . YE . BELL *A bell.*

IN . SPVRIERGATE . YORKE—HER HALF PENY 1668

69 WILL : WOOD . IN . YORKE . MVTISIO.—HIS HALF PENY

PVNCHANELLA. *Figure of Punchinello.*

70 ROB . WRIGHT . HIS . HALFE . PENY *A chevron between three pheons.*

IN . THE . CITY . OF . YORKE . R W M 1668

Uncertain.

Silver 1 in. diam. engraved "William B(or)thern K," floral ornament with six petal flower in the centre.

(Private possession).

YORK TOKENS.

71 S.W. view of York Minster, YORK 1795
Keep with drawbridge, CLIFFORD'S TOWER A.D. 1100
edge, YORK BUILT A.M. 1223 CATHEDRAL REBUILT A.D. 1075

72 var. a, edge, PAYABLE IN DUBLIN OR LONDON

73 var. b, edge, PAYABLE IN LANCASTER LONDON OR LIVERPOOL

74 var. c, edge, FEAR GOD AND HONOUR THE KING

75 var. d, edge, plain with collar

The obv. and rev. dies are found with others of Norfolk and Hampshire.

76 A female seated, and wearing a mural crown and holding a sword, and resting on the city shield, EBORACUM
Cap of liberty, sword and scales, LIBERTAS . IVSTITIA . PAX .
YORK MDCCXCV

77 Laureated head of Constantine with the 'Eagle' standard
CONSTANTINE THE GREAT . BORN AT YORK A.D. 271
City shield, YORK HALFPENNY 1796
edge, PAYABLE AT YORK

78 YORK FARTHING 1814
Naked arm with an olive branch, PEACE AND ALLIANCE

79 City Arms, YORK 1811
ONE SHILLING SILVER TOKEN—CATTLE AND BARBER

80 City Arms, YORK 1811
SIXPENCE SILVER TOKEN—CATTLE AND BARBER

81 Four hands joined, LONDON . YORK . SWANSEA AND LEEDS
ONE SHILLING TOKEN. TO FACILITATE TRADE

MEDALS.

82 S.W. view York Minster, YORK MINSTER 1829. diam. $1\frac{3}{4}$ ins.
Rev. YORK MINSTER WAS COMMENCED 1171 COMPLETED 1377
 THE CHOIR OF THIS MAGNIFICENT EDIFICE DESTROYED BY
 AN INCENDIARY FEB^Y 2ND 1829

83 S.W. view York Minster, YORK MINSTER 1829. diam. $1\frac{3}{4}$ ins.
Rev. Interior view of the Choir looking eastwards. THE CHOIR
 OF YORK MINSTER DESTROYED BY FIRE FEBRY 2ND 1829

84 Similar to 71, 1796. diam. $2\frac{3}{4}$ ins.

85 S.W. view York Minster, YORK CATHEDRAL MDCCCXLV
 DAVIS BIRM.
 Bell 'Peter,' THE GREAT BELL OF YORK MINSTER CAST BY
 C. AND G. MEARS LONDON JAN. 18 1848 7FT. 4IN. HIGH
 8FT. 4IN. DIAM. ... TONS WT. G.B.

86 A staff of Aesculapius.
 SCHOLA MEDICINAE EBORACENSIS MDCCCXXXIV
Rev. A full blown rose within a chaplet of olive branches.

87 Duke and Duchess of York. T.R.H. THE DUKE AND DUCHESS
 OF YORK
 TO COMMEMORATE THE VISIT OF T.R.H. THE DUKE AND DUCHESS
 OF YORK TO THE YORKSHIRE AGRICULTURAL SOCIETY'S
 SHOW JULY 22ND 1890. PRESIDENT H.R.H THE DUKE OF
 YORK K.G. W. OWEN LEEDS. G.B.

88 Bust of Constantine within two inscribed circles. Shield of
 York above. + CONSTANTINUS + + MAGNUS + NATUS +
 EBOR (inner circle) + HISTORICAL + 274—337 + PAGEANT
 + YORK 1909
Rev. Bust of St. Helen within two inscribed circles + SANCTA
 HELENA AUGUSTA (inner circle) FUNDATRIX QUIETIS
 INVENTRIX S:CRUCIS 247—327

VI. ABBEY AND NUEREMBERG TOKENS AND COUNTERS.

(i.) *HISTORICAL.*

The coinage has often been supplemented by counters and tokens. There are three varieties known of Edward III.'s Wardrobe Counters which bear on the reverse "GARDE ROBE REGIS."¹

In York have been found a number of thin tokens, many which are in the Museum. The design of a large number of the uninscribed ones is similar to that of the Edwardian coinage, a crowned head occupying the obverse and a cross the reverse. Other obverses have the star and crescent, animals or birds.

The inscribed tokens are larger and are of a distinctive character. The obverse bears usually a shield adorned with fleurs-de-lys, and the reverse a cross often within a quatrefoil. Inscriptions of a religious nature are: "Ave Maria Gratia Plena," "Sit Nomen Domini," or "Verbum Domini Manet In Aeternum." Others bear "Vive le bon Roi de France," "Getes Rien Paie Rien," "Lib. Mich. Als. Ich. Dign," and "Das Sin Raipfig Mulbs."

Tokens bearing the maker's name and Nuremberg abbreviated, date from about the middle of the 16th to the middle of the 17th century. One of Jog. Schultz is dated 1555, and one of Wolfgang Lavfer, 1619. Four families were Rechen Phenning makers, namely, Schultz, of which were Jog and Hans, one of Koch, viz., Kilianus; three of Krawinckle, namely, Egidius, Damianus, and Hans (75), which last made more than all the others put together. Of the Lavfers there were six, viz., Hans, Matthew, Wolfgang (76), Chonradt, Cornelius, and Laz. Gotlieb. Some pieces bear initials only as C.K.

The obverses have usually a rose surrounded by crowns and a fleur-de-lys alternately, whilst the usual reverse is the orb with cross enclosed in a geometrical figure. Other obverses have busts or the lion of St. Mark. A token of Hans Krawinckle depicts a man with a table before him on which are counters and abacus,

and with the alphabet on the reverse surrounded by a German inscription meaning Right Reckoning makes long Friends. Ships are conspicuous on other reverses.

RECKONING PENNIES.

Amongst the Reckoning Pennies or Counters struck by Hans Krawinckle at Nuremberg is one depicting Queen Elizabeth on horseback as she appeared at Tilbury Camp in 1588, "Elizabeth Reg. Ang." in exergue H.K., and on the reverse the shields of France and England quarterly, the shield crowned and "Posvi Deum Adiutorum."

RECKONING COUNTERS MADE FOR ENGLAND.

Coin-like counters were made for England from the time of Charles II. to that of George III., the obverse depicts the Sovereign's head and the reverse chiefly the royal arms. The Museum possesses 13, including two of Charles II.—one the Royal Oak with the King's head, and the other Charles and Catherine, King and Queen; two with bust of William III., with reverses, one, with bust of Queen Maria, the other, four crowned shields with W in each angle and "RECHAN PFEN COVNTERS IOHANN WEIDINGERS"; three with bust of Queen Anna, two reverses showing view across the west end and transepts of a cathedral "ECCLES. ANGL. with legend FVNDAMENTVM QVIETVS NOSTRAE"; three with bust of King George on one side, and two having on the reverse the bust of Queen Caroline, and on the other a view of cathedral as before. Many bear the makers' names.

LEAD TOKENS.

A number of lead tokens are known, they bear the mitred head of a bishop and S.N. (St. Nicholas), the reverses being copied from those of 14th and 15th century groats. The writer has a specimen which bears "S. Nicholae ora pro nobis." The Churchwardens' Accounts of St. Peter, Mancroft, Norwich, record: "1640, paid for leaden tokens 6d, and 300 tokens 3s."¹

¹ Vol. i. B.A.J.

(ii.) *TOKENS, COUNTERS, AND JETTONS.*

UNNAMED.

There are in the Collection of the Y.P.S. about a hundred jettons bearing inscriptions as "Ave Maria," but without the maker's name.

WITH THE MAKER'S NAME. Y.M. 66.

The Lavfer Family.

1. WOLFGANG LAVFER.

1 WOLF. LAVFER. IN. NVRMBERG— Three crosses alternate with three fleurs-de-lys, and with a rose in the centre.

GOT. VERTRAW. VND. AVE. IN. BAV. Globe and cross in a tressure (76). Y.M.

2 *Obv.* as 1.

RECHA. PFENIG. MACHER IN. Globe and cross crosslet in a tressure. Y.M.

3 *Obv.* as 1.

GOTTES. SEGEN. MACHT REICH. Globe and cross crosslet in a tressure. Y.M.

4 WOLF LAVFER IN NVRNB. Type as 1.

GOTTES. GABEN. SOL. MAN. L. Globe and cross. Y.M.

5 WOLFE LAVFFER RECHENPEKNIGMA Globe and cross.

GOTES SEGEN MACHT REICH. Cross with fleur-de-ly at each end and a crowned heart between each limb. S.¹

2. MATTHEW LAVFER.

6 MATHEW. LAVFER. IN. NVRMBERG. Type as 1. [Y.M.

GOTES. SEGEN. MACHT. REICH. Globe and cross in a tressure.

7 MATHEVS. LAVFER. IN. NVRMBERG. Crown and fleur-de-lys, &c.

SOLI DEO GLORIA 1619 Globe and cross in double tressure. S.²

3. HANS LAVFER.

8 GOTES. GABEN Crowns and fleur-de-lys, &c.

HANS. LAVFER. IN. NVRNBERG. Globe and cross. Y.M.

9 *Obs.* illegible.

HANS. LAVFER. IN NVR. Globe and cross. Y.M.

10 KANTEWKERND IN NIMANT. Crown and fleur-de-lys, &c.

HANS. LAVFE. IN. NVRMBER— Globe and cross in a double tressure. S.³

4. CHONRADT LAVFER.

11 CHONRAT . LAVFER . NVRNB . Bust.
ANFANG . BEDENKS . ENDT . Globe and cross in tressure. Y.M.

5. CORNELIUS LAVFER.

12 CORNELIUS . LAVFFER . IN . NVRENBER . Crowns and fleurs-de-lys alternating with a rose in the centre.
GLVCKBE SCHERT . IST . VNVERWEHRT . Globe and cross in tressure. S.¹

6. LAZ. GOTLIEB LAVFER.

The Schvltz Family.

1. HANS SCHVLTES.

13 HANS . SCHVLTES . ZV . NVRENBERG . Lozenge charged with 4 fleurs-de-lys. Y.M.
GLICK . IST . WALCZET . VND . FLIG . Crowns and fleurs-de-lys alternate.

14 HANS . SCHYLTES . NOR . Globe and cross.
GLICK . KVMPT . VON . GOT . Crowns and fleurs-de-lys. Y.M.

15 HANS . SCHVLTES . NORNB . Globe and cross.
GLICK . KVMPT . VON . GOT . IST . WAR . Crowns and fleurs-de-lys.

16 HANS . SCHVLTES . ZV . NVRENB . Globe and cross. [Y.M.
GLICK . KVMPT . VON . GOT . IST . WA . Bust. Y.M.

17 HANS . SCHVLTES . NORNB . Lozenge charged with 4 fleurs-de-lys.
GLICK . IST . WALCZET . VND . FLIG . Ship with sail. S.²

18 HANS . SCHVLTES . NORMP . Ship.
DAS SINRECHEN PNIB X ɔv Cross, fleur-de-lys terminations, and crowns between. S.³

19 GOTES BURT PIEIBT EBI Bust to right. S.³
HANS SCHVLTES NORM . Shield quarterly, fleurs-de-lys and crowns. S.⁴

20 HANS : SCHVLTES : NRDFD BRF Naked figure.
? Shield quarterly, 1 and 4 fleur-de-lys, 2 chevron between 3 annulets, and 3 fess charged with 3 annulets. S.⁵

Iog. SCHVLTZ.

21 ICH IORG SCHVLTES Globe and cross.
ICH IORG SCHVLTES Crowns and fleurs-de-lys. Y.M.

22 ? Lion of St. Mark with book.
IOG SLHVTSE :: NF Globe and cross in tressure. S.⁶

23 NORMBERG . GMAN . ZV Crowns and fleurs-de-lys alternate.
IOG SHVLTES 1555 Globe and cross in a trefoil.

¹ Snelling, p. 4, 31.² 1.³ 4.⁴ 9.⁵ 6.⁶ 15.

The Krawincke Family.

I. HANS KRAWINCLE.

24 HANS . KRAVWINCKEL . NVRENBER . Globe and cross.
MARCVS . EVANGELLIST . GOTT Lion of St. Mark. Y.M.

25 HANS KRAV WINCKEL GOTES Crowns and fleurs-de-lys.
RECHEN PFENING . NVRENBER Globe and cross. Y.M.

26 HANNS . KRAVWINCKEL IN NVRNBE Crowns and fleurs-de-lys.
DAS WORT GOT BLEITWICKLICK Globe and cross. Y.M.

27 *Obv.* as 26 but NVRENB Crowns and fleurs-de-lys.
VERBVM . DOMINI MANET IN ETERN Globe and cross. Y.M.

28 *Obv.* as 27. Crowns and fleurs-de-lys.
GLVCK . BESCHERT . IST . VN . GEWERT Globe and cross. Y.M.

29 HANNS . KRAVWINCKEL . IN NVR Crowns and fleurs-de-lys.
GOTES . SEGEN . MACHT . REICH Globe and cross. Y.M.

30 *Obv.* as 29 but IN N Crowns and fleurs-de-lys.
HEIT . ROTT . MORGEN . DOTT Globe and cross. Y.M.

31 HANNS KRAVWINCKEL . IN . NVR . Crowns and fleurs-de-lys.
GOTT . ALLEIN . DIE . ELRE . SEI . Globe and cross. Y.M.

32 HANS etc. as 31 Crowns and fleurs-de-lys.
GOTE . GABEN . SOL . MAN . LOB Globe and cross. Y.M.

33 As 32 but IN NV Crowns and fleurs-de-lys.
GOTES . REICH . BLIBT . EWICK Globe and cross, Y.M.

34 HANS KRAVWINCKEL RECHEN :: PFENI . Fleurs-de-lys crosswise.
PIETA ET IVSTITIA 3 fleurs-de-lys on crowned shield. S.¹

35 HANS KRAVWINCKEL GOTES 4 fleurs-de-lys within a diamond
and 4 at the sides.
SCHIF PFENING NVRENBERG Ship.

2. EGIDIUS KRAWINCLE.

3. DAMIANUS KRAWINCLE.

KILIANVS KOCH.

36 KILIANVS KOCH NVRENBERG
RECHEN PFENNING

37 *Obv.* as 55.
Rev. VERBVM . DOMI MANET IN AETER

¹ Snelling, pl. v., 28.

(iii.) *BRITISH TOKENS AND MEDALS.*

There is a good collection of British copper tokens and half-pennies, including local ones with views of Bolton Castle and the abbeys of Fountains and Rievaulx.

Amongst the British medals there are catalogued : one of James I. and two of Charles I., namely, (a) bust "Successor veros utriusque, Jan. 30, 1648," and on the reverse a salamander amidst flames; (b) bust "Carolus D.G. Mag. Br. Fra et H. Rex," and on the reverse "Florebunt," shield with garter, and beneath T R (T. Rawlins). Another has a bust in armour (Gen. Monk?) "The sword of the Lord and Gideon." "In the multitude of councillors there is peace." The deliberations depicted are King and Lords, and Speaker and Commons. Other medals are of Charles II. (4), James II., William III. and Mary, Anna, George, Caroline ("Hail Britain's queen ! thy virtues we acknowledge and lament thy wrongs"), George and Charlotte, William III. and Adelaide, and Victoria. There is a medal commemorating Henry Brougham, M.P., of commerce the enlightened friend, and of national integrity the virtuous, eloquent, and undaunted supporter. Other medals testify to the victories on land or sea obtained by Wellington, Vincent, Duncan, Nelson, Warren, Spenser, Moore, Anglesey, and "Bonaparte surrendered to H.B.M.S. Bellerophon, Capt. Maitland, July 15th, 1815."

Of Election silver tokens there are: Lascelles for ever—in mind independent, in exertion indefatigable. Lord Milton for ever, 1807—King and Constitution—Independence—Commerce. Wilberforce for ever, 1807—Humanity is the cause of the people—King and Constitution. Charles William Viscount Milton (bust to left) elected M.P. for the County of York, the 5th June, 1807, 11177 votes, majority 187.

(iv.) *BRITISH POSSESSIONS.*

There are a few coins relating to British possessions, the principal being the Barstow Collection of Indian Coins, of which a few are square.

(v.) *FOREIGN COINS.*

There is a small collection ; a few coins of the United States, Mexico, Panama, France, and the South African Republic (Kruger) were presented by Dr. T. Anderson.

VII. THE YORKSHIRE PHILOSOPHICAL SOCIETY'S COIN COLLECTION.

(i.) *HISTORICAL.*

The coins unearthed in York are principally Roman, the bronze ones are often much corroded. Mediæval coins and Nuremberg tokens are scarcer, whilst the find of a *styca* is a rare event.

At the beginning of the 18th century Alderman Elcock and Sir James Brooke had cabinets of coins. Dr. Langwith, who left York in 1700 for Cambridge, had also a collection of coins from York, which his father, one of the Minster vergers, helped him to gather together.¹

In 1704, an oak box, containing 250 coins of William I., was found in High Ousegate. About a hundred were considered worth preservation, and Thoresby, the Leeds antiquary, examined about fifty of them.

Drake, in his "Eboracum" published in 1836, gives a catalogue of Dr. Langwith's Roman coins which numbered 126, and ranged from Augustus to Gratianus, and which were found in the brick-yards outside Bootham Bar and between Bootham and the river. Drake remarks that the Roman coins found at York are of a late date and in a bad condition, and adds, "I never heard of any exceeding rare ones being found, they are mostly of the base Empire, and amongst them *Geta's* coins are the *commonest* of any." He also gives some account of the Saxon and Danish coins minted at York and those coined at York from the Norman Conquest to those issued by William III. He illustrates 48 of the Saxon and Danish coins and also 50 York tradesmen's halfpennies from the collection of Samuel Smith, baker, in Grape Lane. In the reprint of "Eboracum" in three volumes in 1785, there is a catalogue of 68 Roman coins in the possession of W. White, F.A.S., of York, and 6 belonging to T. Beckwith. Drake ascribed to King Edwin a penny which evidently belongs to Edward the Confessor. The coins of Eadberht, King of Northumbria, were formerly assigned to Ecgberht, King of Kent; the correction was made by Hawkins.

In 1802 about 100 silver pennies² of William I. were found on the site of the City Jail, near Baile Hill.

The coin cabinet of the Yorkshire Philosophical Society is in the Council Room. In 1823, the Rev. W. V. Vernon presented

¹ Raine, "Y.M. Handbook."

² Hargrove's "Guide," p. 26.

six moulds for Roman coins, found at Wakefield. In 1824, a collection, consisting of some 750 Roman brass, 90 Roman silver, 24 English gold coins and medals, and 385 Saxon, Norman, and English silver coins, was purchased of Mr. Henwood, of York, for £210. Amongst donors of coins were Archdeacon Eyre, Peter Atkinson, Dr. Beckwith, and Dr. Goldie. In 1825, Ald. Smith gave 20 Roman silver, Joseph Eglin 133 Roman brass, Thomas Meade 6 Roman pseudo-silver, 64 brass and 1 Greek coin; Rev. W. Watkinson 4 Consular and 18 Imperial silver and brass. In 1827, 155 coins, medals and dies were added. In 1831, E. Strickland gave 18 Roman coins found without Micklegate Bar.

In 1832, the collection of coins formed by Barnard Clarkson, of York, was catalogued (18 pp.) and sold by auction by Joseph Stringer, at Mrs. Sowerby's, White Horse inn, Coppergate, on Tuesday, Thursday, and Friday, March 20th, 22nd, and 23rd, at 7 p.m. each day. Ten curious medals sold for 2s. 6d., 180 Abbey pieces found at Kirkham Abbey for 14s. 6d., 80 monastery pieces for 3s. 6d., several hundred English, foreign, and provincial copper coins realised 16s. 6d. Of Roman gold Nero made 27s., Titus 24s., Domitian 27s., and Theodosius 21s. Five gold Saxon coins were also sold. Forty Roman silver from Julius Cæsar to Theodosius were sold for £8 10s. Forty Consular silver made £4 4s. 6d. 585 Roman coins realised £3 7s. Three pennies of Henry VII. with bishops' initials were sold for 2s., whilst 6 pennies of Henry VIII. with bishops' initials were sold for 7s. 6d., and a half-crown of Charles I. marked "Ebor" realised 12s.

In 1833, the Corporation presented to the Museum 46 Roman brass, including those of Nero, Domitian, and Constantinus M, which were found in removing the rampart near Bootham Bar.

Excavations for the railway and the building of Parliament Street were in progress in 1837. At the latter an uninscribed gold coin was found, on it is represented a bull with human head, and on the reverse a figure in armour on the skeleton of a horse.¹ Amongst private collectors of coins were William Hargrove, the proprietor of the "York Herald"; Robert Cook, who collected on behalf of Thomas Bateman, the well-known Derbyshire antiquary; and Mr. James Cook, his brother.²

In 1840, a number of Roman *denarii* was found in York. Two years later a hoard of some thousands of stycas, the copper coins of the Northumbrian Kings in the 8th and 9th centuries, was found in Mint Yard (St. Leonard's); about 4000 are now in the Museum. In 1845, 500 coins of William I. were found at the

¹ Hargrove, p. 63.

² Raine, "Y.M. Handbook."

corner of Coney Street and Jubbergate, 200 of which were examined by Hawkins.

In 1846, the "Hargrove" Collection, consisting of 5 Roman family and 218 Imperial coins, was purchased for the Society. In the next year the Museum Collection was enriched by a find of 2000 stycas near Bolton Percy. In 1856, Lord Londesborough presented 1276 Roman coins from a hoard found at Methall, near Warter; and W. Rudston Read 53 coins from the same hoard. In 1864, Miss Lloyd, of Peaseholme House, presented numerous coins (foreign), medals, and tokens. In 1874, Robert Davies presented his collection of stycas, found in York.

In 1878, the coin collection of C. D. Wolstenholme was sold by auction on April 12th, at the De Grey Rooms. There were 247 lots. Of Roman gold, Valens realised 17s, Valentian 22s. Faustina 30s., Honorius 19s., and Arcadius 21s.

In 1879, the Society's Collection was enriched by the purchase of 170 Roman silver coins found in an urn at Boston Spa in 1848, and by a set of stycas found at the Exhibition in 1879. In 1882, a large number of silver pennies of the Confessor and the Conqueror were found on Bishophill. In March, 1891, more than 6000 brass coins of Constantine I. and his family were found in an urn at Langwith, near York, and were presented to the Museum by Bateson de Yarburgh, Esq. In 1893, Mr. Lund presented a large number of coins. In 1898, about 200 Roman silver coins were found in Railway Street, a few were secured for the Museum. In 1905, H. C. Barstow gave a collection of Indian coins, and in 1907 Dr. Tempest Anderson presented gold, silver, and copper coins of the United States, Mexico, Venezuela, etc.

The Collection has been inspected by many eminent numismatologists. In 1897, Lord Grantley with Canon Raine examined the sceattas and stycas, and his lordship exhibited the MS. catalogue of them on February 18th, at the meeting of the Royal Numismatic Society.

In 1900, Mr. Carlyon-Britton, F.S.A., examined the coins of William I., and labelled them. Major A. B. Creeke, Messrs. W. J. Andrews, F.S.A., and F. A. Walters have also inspected the Collection.

The hon. curators have been Rev. Charles Wellbeloved, Rev. John Kenrick, and the Rev. Canon Raine. Mr. Charles Wakefield is the present hon. curator.

(ii.) COINS.

The coins are arranged in drawers numbered as follows:—

28 Greek.

42 Brigantian.

ROMAN.

1-27 1, silver; 2, gold and silver; 3-6, silver, "Hargrove Collection"; 7-10, large brass; 11-18, middle brass; 19-22, small brass; 23, large brass medallions; 24, silver and middle brass; 25, casts; 26, Roman foreign; 27, thick middle brass.

1-13 Small cabinet below, bronze, Langwith Find.

19-23 " " " silver "

1-3 Right-hand slides, Methall (Nunburnholme) Find.

THE ANGLIAN KINGDOM OF NORTHUMBRIA.

52-56 Stycas—53, Hexham; 56, lower tray, Archiepiscopal mint.

42 Sceattas—Archbishop Egbert.

4-13 Right-hand slides, St. Leonard's Find, 1842, purchased from John Browne.

15-16 Right-hand slides, St. Leonard's Find, 1842, purchased from Mr. Hargrove and presented by C. Wellbeloved.

17-24 Right-hand slides, Bolton Percy Find, 1847.

14 " " Bolton Percy Find, 1847, 1st and 2nd Supplement to MS. Catalogue.

In a small oak black box there are 198 stycas from the York Find. They are placed between glass and were presented by Robert Davies.

THE VIKING KINGDOM OF YORK.

42 A few pennies of Cnut (Guthred), and S. Edmund.

THE ANGLO-DANISH KINGDOM OF ENGLAND.

42 Silver pennies of Edward the Elder, Athelstan, Eadred, and Ethelred.

KING EDWARD THE CONFESSOR.

44 176 silver pennies of Edward the Confessor.

THE NORMAN CONQUEST.

46 143 silver pennies of William I., two of William II., 22 others (7 broken).

ENGLISH COINS.

29-40 29-30, gold; 31-40, silver; 31, crowns; 32-33, half-crowns; 34-36, shillings, 36 (lower tray); 37, sixpences (below are shillings of Elizabeth and James I. found at Deighton, and presented by Lord Wenlock); 38, sixpences; 39, threepences; 40, groats and half-groats, three-halfpence and pence.

47 Lower tray, 76 coins found in York Minster, 1829.
 48 Edward I. and II.; lower tray, 35 coins found in the soil
 above the grave of Archbishop Scrope.
 1-15 Small cabinet trays, silver, Victoria and Edward VII.
 1-10 Left-hand lower slides, copper coins.

NUREMBERG AND ABBEY TOKENS.

29-30-32-33-34 Left-hand lower slides.

TOKENS, BRITISH MEDALS.

25-26 Small cabinet, silver tokens.
 Left-hand upper slides, copper tokens, 1-3-5-6-8-10, 11, 12,
 14-16, 24-33, 35-51, 59-65.
 Left-hand lower slides, copper tokens, 12-16, 17.
 Election tokens, upper side slides on left, 1.

FOREIGN COINS.

18 Left-hand lower slides, Dr. Anderson's Collection.
 22 ,, ,, 2 Indian and 2 Barbados coins.
 23 ,, ,, Foreign and Colonial copper.
 35-40 ,, ,, "Barstow" Collection of Indian
 coins.

(iii.) BIBLIOGRAPHY.

ABBREVIATIONS: B.M.—British Museum. Y.P.S.—Yorkshire Philosophical Society. N.C.—Numismatic Chronicle. B.N.J.—British Numismatic Journal. Y.A.J.—Yorkshire Archaeological Journal. B.A.J.—British Archaeological Journal.

GREEK.

Out of 22 B.M. illustrated catalogues of Greek coins published up to 1901 the Y.P.S. possess three, namely, 1884, Central Greece, plates xxiv.; 1886, Crete and Aegean Islands, plates xxix.: 1887, Pelopponesus, plates xxxvii.

ROMAN.

Y.P.S. MS. Catalogue I. Roman Coins in the Museum, 1854,
 C. Wellbeloved, Curator.
 „ „ II. A Catalogue of 172 Roman Coins
 found in a Roman vessel at Boston
 Spa, near Tadcaster, June 1st, 1848.
 „ „ III. A rough Catalogue of Roman Silver
 Coins purchased in 1846 from Mr.
 Hargrove.
 „ „ IV. Roman Coins found at Methal, near
 Warter & Nunburnholme in 1856, &
 presented by Lord Londesborough.

Books. 1775. Eckhel's *Numi Veteris*.
 1834. J. Y. Akerman, *Roman Coins*, 2 vols.
 1838 , , *Coins of the Romans relating to Britain*.
 1840 , , *Numismatic Manual*.
 Pamphlets. N.C. 1906. *Coinage of Allectus*. P.H. Webb.
 N.C. 1907 , , *Carausius* , ,
 N.C. 1912. *Helena N.F.* P. H. Webb.

THE ANGLIAN KINGDOM OF NORTHUMBRIA.

Y.P.S. MS. Catalogue, (a) A portion of St. Leonard's Find in 1842 purchased from J. Browne.
 (b) p. 57, a portion of St. Leonard's Find in 1842 purchased from Mr. Hargrove and presented by C. Wellbeloved.
 (c) p. 152, part of the Bolton Percy Find in 1847.
 (d) p. 239, Supplementary , ,
 p. 261, 2nd Supplement , ,
 Pamphlets, &c. C. Roach Smith, 6 pp. 1 plate, N.C. 1843. *Saxon Gold Coins*, York, 1849, illustrated, B.A.J. vol. ii. p. 190.
 Books. Y.P.S. *Proceedings*, 1855, Bolton Percy Find, about 600 purchased, pp. 66-69. C. Wellbeloved. *Notices of the York Mints and Coinages*, pp. 191-269. Robt. Davies.
 B.M. 1887. *Catalogue Anglo-Saxon Coins*, 2 vols.
 N.C. 1845. 3489 Stycas found at York. Smith, Haigh and Cuff.
 N.C. 1847. *Bolton Percy Find*.
 B.N.J. 1904-1910. (Not in Y.P.S. Library).

THE VIKING KINGDOM OF YORK.

1866. The *Coins of the Danish Kings of Northumbria*, Rev. D. H. Haigh. *Archæologia Æliana*.
 N.C. 1869. *Coins of Northumbria*. Jonathan Rashleigh.
 Y.A.J. 1877. *Yorkshire Mints under the Danish Kings*. D. H. Haigh.
 1887. *Danish and Norse Kings in Northumbria*, vol. i. B.M. *Anglo-Saxon Coins*.

THE ANGLO-DANISH KINGDOM OF ENGLAND.

1887. B.M. *Catalogue Anglo-Saxon Coins*, vol. ii.

KING EDWARD THE CONFESSOR.

1887. B.M. Catalogue Anglo-Saxon Coins, vol. ii.
 Y.P.S. 1910. Description of the Coins of Edward the Confessor in the Collection of the Y.P.S., by Charles Wakefield, hon. curator of Numismatics.
 N.C. 1905. Coins of the Confessor. P. Carlyon-Britton, F.S.A.
 B.N.J. Vol. iii. etc.

THE NORMAN CONQUEST.

B.N.J. P. W. P. Carlyon-Britton.
 N.C. 1904. Coinage of William I. and II. Fred Spicer.

ENGLISH COINS (General).

1762-6. Snelling, Thomas, Coinage of England: Silver, 1762; Gold, 1763; Copper, 1766.
 1793. Leake's English Money from the Conquest. 3rd ed.
 1817. Ruding, Roger, Rev., Annals of the Coinage. 3 vols. 3rd ed. 1840.
 1841. Hawkins' Silver Coins of England. 2nd ed., edited by Kenyon, 1876. 3rd ed. 1887.
 1884. Kenyon's Gold Coins of England.
 1893. Montagu's Copper Coins of England.
 1899. B.M. Handbook of the Coins of Great Britain & Ireland.

YORK MINT.

1854. Historical Notices of the Royal and Archiepiscopal Mints and Coinages at York. Robert Davies, F.S.A.
 1908. The Archiepiscopal Coins of York. Rev. Cæsar Caine.

Special Articles in the "Numismatic Chronicle."

Henry I., Numismatic History of. W. J. Andrews. 1901.
 Chronology of the Short-Cross Period. G. C. Brooke. 1910.
 Edward I., II., III., Richard II. etc., Balcombe Find. H. A. Grueber and L. A. Lawrence. 1898.
 Edward III., The Last Silver Coinage of. F. A. Walters. 1902.
 Richard II. Coinage. F. A. Walters. 1904.
 Henry IV. " L. A. Lawrence also F. A. Walters. 1905.
 Henry V. " F. A. Walters. 1906.
 Henry VI. Gold Coinage. " 1903.
 " Restoration. " 1910.
 Edward IV. Coinage. " 1909-10.
 William III., The Great Re-coinage of 1696-1697. T. H. B. Graham. 1906.

British Numismatic Journal, 1904-1913. (Not in Y.P.S. Library).

Long-Cross Coinage, Henry III. and Edward I.

L. A. Lawrence. 1913.

Numismatic History, Edward I., II., III. E. and S. Fox.

William III. Miss Helen Farquhar.

Proceedings of Numismatic Societies.

N.C. 1836-1913.

The Yorkshire Numismatic Society was founded in 1909.

TOKENS, MEDALS.

Y.P.S. MS. Miscellaneous and Supplementary Catalogue of Coins, Medals, etc., English and Foreign.

1. Coins and Medals, English and Foreign, presented by Capt. Hotham.
2. Tradesmen's Tokens of the middle of the 17th Cent.
3. Greek Coins and Medals. Jewish Coins, &c. 4 Medals.

1858. Boyne's 17th, 18th, and 19th Century Yorkshire Tokens.
1866 Silver Tokens.

1892. Atkins' Tokens of the 18th Century.

NUREMBERG AND ABBEY TOKENS.

1769. Origin and Use of Jettons. Thomas Snelling.

BRITISH POSSESSIONS.

1757. Ducarel's Anglo-Gallic Coins.

1889. Atkins' Coins of British Possessions and Colonies.

FOREIGN COINS.

Y.P.S. MS. Catalogue, Sept. 1876.

1893. Coinage of the European Continent. W. Carew Hazlett.

VARIOUS.

Wilde's Selecta Numismata Antiqua, presented by Thomas, Earl of Pembroke, to Ralph Thoresby (autograph) 1701.

1766. Pegge's Coins of Cunobelin.

1772. Pegge's Coins of the Archbishops of Canterbury, also the famous Unic of Thoresby, supposed to be a coin of St. Edwin shown to be a penny of Edward the Confessor.

SALE CATALOGUES.

1896. Boyne's Collection, 1832 lots.

1913. Carlyon-Britton Collection, priced.

1913. Dudman Collection.

1914. C. Clarke's Coins, Charles I., priced.

PRESENTED
- 8 SEP. 1915





1.
SYRACUSE



2
ALEXANDER THE GREAT



3
ATTIC TETRADRACHM



4
ATHENS. EARLY 5TH CENT B.C.



5

ROMAN VASE CONTAINING COINS.

Found at Langwith, York, 1891.





6



7



8



9



10



11



12



13



14



15



16



17



18



COINS OF THE BRIGANTES ETC.



19
VESPASIAN20
MARCUS AURELIUS21
CONSTANTIUS II.22
LEO I.

GOLD

23
SEVERUS24
JULIA DOMNA25
CARACALLA26
GETA

SILVER

27
TRAJAN

BRONZE

28
HADRIAN

ROMAN COINS





29



30



31



Langwith



32



33



Langwith



34



ST HELEN



35

CONSTANTINE THE GREAT
Langwith

36

URBS ROMA
Langwith

37



CONSTANTINOPOLIS. Langwith

ROMAN COINS.



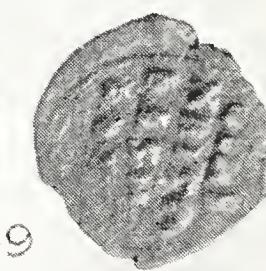
38



DECENTIUS



39

(10th CENT.)

CHRISTIAN EMBLEMS





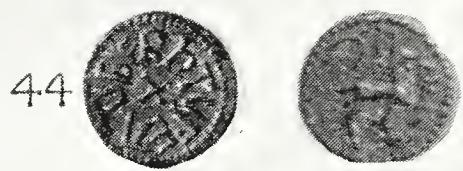
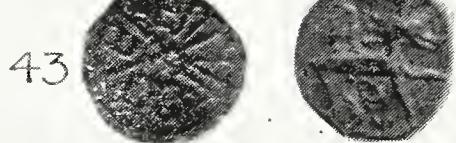
40
JOHANNES ZIMISCES
CHRISTIAN EMBLEMS



41
(10th CENT.)



45
Part of
HOARD OF STYCAS
Bolton Percy



SCEATTAS

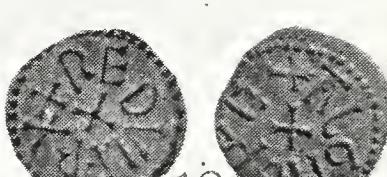
EADBERHT



EANRED



ETHELRED II.



REDVLF



NORTHUMBRIAN COINAGE



ETHELRED II.



CNVT



SIEVERT



ATHELSTAN (*Norwich Mint.*)



DANISH KINGDOM OF YORK.





54 ETHELRED



ANGLO-DANISH



55



CNVT (Canute)



56



EDWARD THE CONFESSOR



57



WILLIAM I.



58



WILLIAM I.



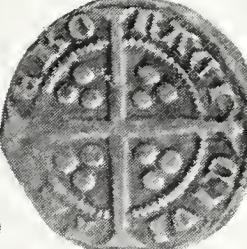
59



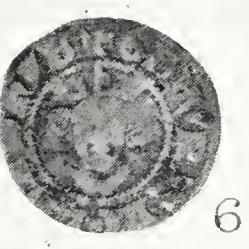
HENRY II.



60



EDWARD I.



61



EDWARD II. (London)



62

EDWARD III
(Enlarged.)

63



EDWARD VI.



64



YORK REGAL MINT

CHARLES I





65



66



67



WILLIAM III.



68



69



70

TRADESMEN'S HALFPENNIES



71



72



73



74



YORK TOKENS.



75



NUREMBERG



76



TOKENS.





77 ARCHBISHOP EGBERT



78



79



80 EANBALD II.



81

VICMUND



82

WULFHERE



83 ST PETER



84



85 HAND



86 EDWARD THE ELDER



87 "MINSTER"



88 REVERSES



89 OPEN QUATREFOIL

90 ARCH^{BP} SAVAGE

91

CARDINAL WOLSEY

THE ARCHIEPISCOPAL MINT



